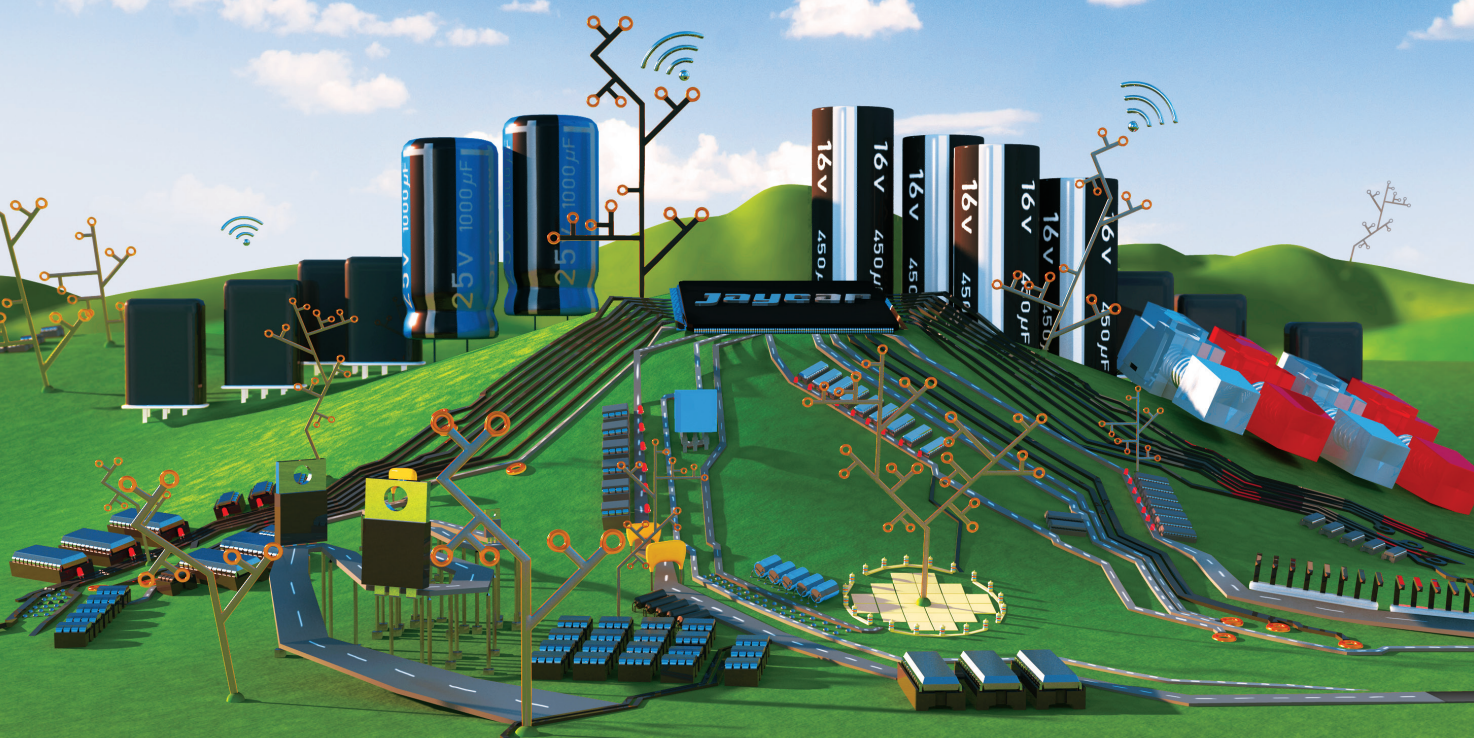


2015

LET'S
PLAY...



7060+ PRODUCTS
620+ NEW PRODUCTS
548 PAGES

\$4.95

www.jaycar.com.au

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A LETTER TO OUR CUSTOMERS

To many, the Second World War seems like ancient history. Indeed most of the people who fought in it, or participated in some way are no longer with us. The effect of this hideous conflict and its aftermath, including the following 'Cold War' has been profound.

Its legacy has spawned a number of inventions which have utterly transformed the world today. This has crept up on us.

Firstly, WWII demanded the development of the computer. The wartime computer was needed to process massive amounts of information from artillery trajectories, breaking secret codes to doing the heavy mathematics required to design the atomic bomb. These were actually specialised computers (today we call them "Embedded Systems", see page 18 for a definition.) General purpose, or externally programmable computers came quickly after WWII.

The other major invention was the concept of 'The Internet'. It was really spawned from the Cold War via military/academic (university) collaboration. Some clever people realised that in a Nuclear War, command and control would probably be quickly obliterated on all sides. In order to survive, a command network would need to be completely amorphous and decentralised to function. That is, of course, the primary characteristic of the Internet we know today.

Both the Internet and personal computers developed completely separately. The advent of the 'intimate' relationship between the two is a classic example of "a marriage made in heaven".

Which brings me to the new Jaycar catalogue.

Developments in personal computing have proceeded relentlessly. Mobile phone technology is creeping towards personal computing as well. At a DIY hobby level, however, is where, you, our customers are in for a thrilling ride.

There have been a number of false starts, but the emergence of serious hobby computing or 'hacking' has come of age. A serious small computer 'platform' has emerged which has reached a critical mass. This product, developed in Italy of all places has taken the world by storm in terms of Home/DIY experimentation. This product promises to revive the fraternity of those who wield soldering irons for love.

The product is called 'Arduino'. It is basically a small but powerful computer with all of the sophisticated input/outputs that you would expect from a much larger computer. Perhaps more significantly is the truly massive number of peripheral products, generally configured as PCB based devices which have made the Arduino product into a phenomenon.

We believe that this product is so profound we have completely re-jigged our traditional kit section. Have a look from page 9. It may change the way you think about, well, the future.

Just like the explosion of imagination that PCs and the Internet has generated, we expect that a similar renaissance will occur at Arduino board level. We will be seriously encouraging innovation in this area.

Notwithstanding this, we have some fantastic other new products in our 2015 lineup.

Since introducing the \$1,300 3D printer last year, we have been able to nearly HALVE the price of this product and built and tested to boot (p. 36)! There's a printer with Arduino controller for you to build (p. 35). Apart from this, we have several new HDMI converters and upscalers (p. 417 - 419), wireless security systems that connect to your Wi-Fi network (p. 453 - 454), a range of Power Banks to extend the life of your Smartphone or Tablet (p. 473), clever wireless weather stations (p. 266 - 269).

We have expanded the range of Anderson® and High Current Connectors (p. 179 - 180), Car Event Recorders and Trackers (p. 221 - 227), Driving Lights of all shapes and sizes (p. 233 - 237), In-car Entertainment Systems (p. 247 - 249) and a huge range of 12V Cabin and Worklights (p. 261 - 265). There's a few new Jump Starters as well (p.301 - 302).

And when you want some fun, check out our exciting new range of RC Quadcopters, Planes, Cars and Boats (p. 513 - 520).

We have opened new stores in both Australia and New Zealand as promised. Look out for more over 2015! Which does not mean to say that we have turned our back on our online customers. The online business continues to grow with many people preferring to deal with us in this way, especially with the online only specials that are exclusively offered.

Economic times were tough in 2014, there's no denying it. We still managed to post good growth but we are not that confident that the economy will turn around this year, especially with depressed commodity prices.

In these uncertain times I can promise something. Jaycar will continue to provide a stream of exciting, innovative products, served by enthusiastic people who love their jobs.

All of us continue to serve you again in 2015.

Enjoy the ride!

GARY JOHNSTON

Jaycar
Electronics

ABOUT OUR COVER

An artistic throwback to the "electronics cities" many of us grew up with, when computers were made mostly with discreet through-hole components. We're so excited by the various communities developing around open-source programmable electronics, and how its revolutionising DIY tech, it inspired the component city on the cover.

Around 10yrs ago, the first SMD microprocessor was used in a Jaycar kit. Now you can build your own Wi-Fi-enabled, Touch-screen interfaced, custom developed electronics with power unimaginable just a few decades ago. Programming no longer takes years of university and tedious tinkering, but primary school kids can now develop and deploy simple apps in just hours.

This new generation of Tech is at your fingertips. The sky is no longer a limit, it's merely a milestone. Let's play.

LET'S BUILD HARDWARE

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9

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65

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93

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LET'S ENTERTAIN

SIGHT & SOUND

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LET'S SECURE

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LET'S CONNECT

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LET'S HAVE FUN

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LET'S ORDER HOWEVER YOU LIKE



1. VISIT YOUR LOCAL JAYCAR STORE

With over 90 stores in Australia and New Zealand our network of retail stores continues to grow. Come and visit us at one of these locations - see our website or the back cover for full address, phone and trading hours details. Our friendly, experienced staff look forward to showing you our extensive range of products.



2. CALL OUR TOLL FREE HOTLINE

1800 022 888

Our experienced Techstore staff are waiting to take your order. Techstore operates Monday to Friday 6.30am to 7.30pm (AEST) and Saturday 8.30am to 5.00pm (AEST)



3. ORDER ONLINE

WWW.JAYCAR.COM.AU

Place orders from the convenience of your home on our secure website 24 hours a day, 7 days a week



4. POST YOUR ORDER

Send through the post, enclose your completed order form (on page 527) and send to:

**JAYCAR ELECTRONICS
PO BOX 7172 SILVERWATER DC
NSW 1811 AUSTRALIA**



5. FAX YOUR ORDER

Simply complete the order form (on page 527) and fax it any time to **(02) 8832 3118**

LET'S TALK TO THE TECHSTORE

YOUR VIRTUAL ACCESS POINT.

In a case where you are unable to get to your local Jaycar store, we provide you with the Jaycar Techstore. Fax or Email your order to us at any time or alternatively you may speak to one of our professional shop trained staff members who will be readily available to assist you.



Free call order line: **1800 022 888**

Monday to Friday 6.30am to 7.30pm, Saturday 8.30am to 5.00pm (AEST)

Email: **techstore@jaycar.com.au**

LOOKING FOR AN OLD KIT?

We maintain in our central distribution warehouse an extensive range of discontinued Electronic Project Kits. On our website each of these kits has a full description and, where available, a link to the original article on the Kit.



www.jaycar.com.au/kitbackcatalogue or see page 50.

LET'S FIND YOUR NEAREST STORE

Locate your nearest Jaycar store on your iPhone® with our Store Locator App. Search for Jaycar on iTunes® or scan this QR code.



PRICES

Prices effective **1st May 2015.**

LET'S UNDERSTAND QR CODES

QR codes are used as a shortcut to particular mobile/website locations without having to type in long web addresses. Mainly used by mobile devices - Smartphones & Tablets. Just download a QR Reader App from iTunes® or Google Play® and scan the code. Your device will directly land you on the relevant website page.

TRADEMARK NOTICE

iPhone®, iPod®, iPad® and Lightning™ are trademarks of Apple inc. All other trademarks and copyrights are property of their respective owners.

LET'S UNDERSTAND THE ICONS



NEW PRODUCT

This is a brand new product for the Jaycar 2015 Catalogue.



VIDEO AVAILABLE

We are building our library of videos to show how to build some items like say kits, and to also show product features and how they can be used. This icon denotes there is a video available on our website and our YouTube® channel.



WEB

More information about this product is available on our website.



DIY

This product includes components that you have to build yourself.



BOOK

See page 545 for our book index.



PRICE DROP

We've permanently dropped the price on this product - we're passing on savings to you.



PRODUCT WARRANTY

These icons indicate the warranty of a product, or if located on the top right hand corner of a page, the warranty for all the products on that page. Warranty only covers faults in manufacture, unless stated otherwise.



RELATED PRODUCTS

These boxes indicate an accessory or tool you may need to complete your setup.

TECH TALK

Our team of dedicated electronics experts suggest these tips for our catalogue to encourage you to experiment and think outside the box when it comes to your electronics projects.

LET'S TRADE

ARE YOU IN THE TRADE?

If you're a professional engaged in the regular purchase of electronics goods for business purposes, you may qualify* for a Jaycar Electronics Trade Card. Our Trade Card gives you access to special trade prices in all our Jaycar stores including our online Techstore. Jaycar provides you with convenient locations, fantastic service and great prices!

How do I get a new trade card - VIP? For full details apply online or at your local store.

To apply visit: www.jaycar.com.au/tradecard

**Conditions apply:*

Trade Cards are not available for transactions outside Australia and New Zealand. They are valid at Jaycar company owned stores ONLY. Products on special are excluded.



LET'S REWARD YOU

OUR WAY OF SAYING THANKYOU.

What Is A Rewards Card?

As a way of saying thank you - everyday - we've put together a loyalty programme, we've called Jaycar Rewards. It's for our regular customers who love DIY everything electronic!

The Jaycar Rewards programme will entitle you to accumulate points with every purchase* at any Jaycar Store*. We're going to run special promotional deals just for club members and lots, lots more. Keep an eye out for these promotions in our monthly brochures later this year.

How do you get a rewards card?

The Rewards programme is running now. Join the thousands already signed up. You can apply for your card now by visiting www.jaycar.com.au/rewards and filling in the online application form. We will then send you your very own Jaycar Rewards card*. So keep an eye out. Again from all of us at Jaycar, thank you for your continued support and we look forward to being able to provide assistance to you when you next visit your local Jaycar Store. To apply visit www.jaycar.com.au/rewards

To apply visit: www.jaycar.com.au/rewards

**Conditions apply, company stores only and only available for transactions in Australia and New Zealand.*



LET'S GIVE A GIFT CARD

Can't decide what to buy for that "hard to buy for" person? Give them a gift card! We've replaced our paper vouchers with new debit card size plastic one. These are available for purchase in-store or online. These are a great gift idea, easy to use and you can now check the balance of the card online.

**Minimum value \$20 and conditions apply. Only available for Australian and New Zealand Customers. Full terms and conditions available - see our website.*



Jaycar

Electronics

NEW PRODUCTS IN 2015...

HERE'S JUST A FEW OF OUR 624 NEW PRODUCTS



KJ-8967 p39

Engine Kit



Gaming Headphones

AA-2126 p381



Microscope*

p42 **QC-3754**

Selfie Pole*

p492 **QC-8068**



ST-3343 p255

Camping Light



MI-5722 p317

Inverter with Solar Regulator



Pro Weather Station

XC-0410 p267

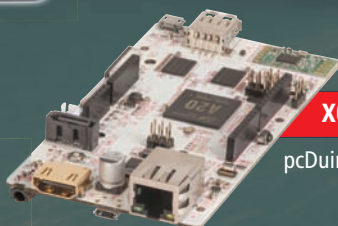


Blade Circuit Breaker

SF-2336 p298

Dual Battery Isolator

p306 **MB-3688**



XC-4350 p10

pcDuino V3.0



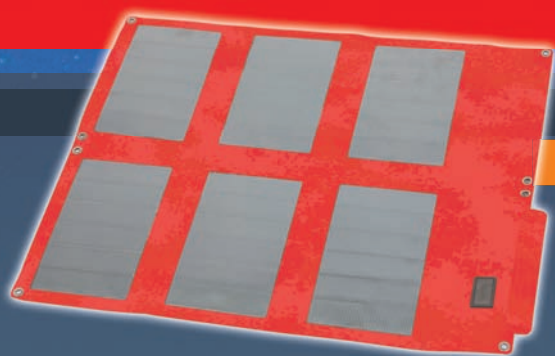
Jump Starters

MB-3730 p301

Portable PA

p372 **CS-2541**





ZM-9160 p285

Canvas
Solar Panel



12V Battery
Tester

QP-2261 p302



Wall Plate
with USB

MS-4009 p342



MB-3646 p473

Power Banks
for Smartphones*

Wi-Fi IP
Cameras

p446 **QC-3842**



p248 **QM-3872**

12V 9"
Monitor



LED
Worklights

p263 **ST-3272**



Rechargeable
Worklight

p265 **SL-2792**



Quadcopters

GT-4040 p516

Wi-Fi Alarm Kit

LA-5610 p453



Car Amplifiers

AA-0464 p249



* Smartphones not included

OUR NEW & IMPROVED WEBSITE IS HERE!

Jaycar always brings you the latest in technology, and now we bring them together in one state of the art online experience. Our new website provides a powerful platform that gives you the simple tools to fulfill your needs - faster, easier and better.

MORE INFO
WEB

FIND YOUR PRODUCTS

Find products with ease. Our new website is fully integrated so it is always live with the most complete, accurate and up to date information. Searching is a breeze with a powerful keywords engine; similar and relevant items can be compared side by side so you always find the most suitable product for your needs.

FLYERS & CATALOGUE

Jaycar issues two monthly flyers full of specials, deals and rewards bonuses. You will not miss out on these great offers again with these digital flyers. We have also made an electronic PDF copy of this great catalogue which you can download and share freely.

SHOP ONLINE

Many of our customers choose to shop online with us because it is simple, reliable and saves tonnes of time. With our improved website, you can find all the information you will need before purchase. Checkout is simpler to save you more time, and special deals are easier to spot to save you more dollars.

STORE FINDER

Even the most die-hard brick and mortar shop loyalist will appreciate this website as it is now easier than ever to locate your nearest Jaycar store. We have over 300 company owned stores and authorised Stockists across Australia and New Zealand. Simply enter your postcode or area to find the closest one to you.

MULTIMEDIA RESOURCES

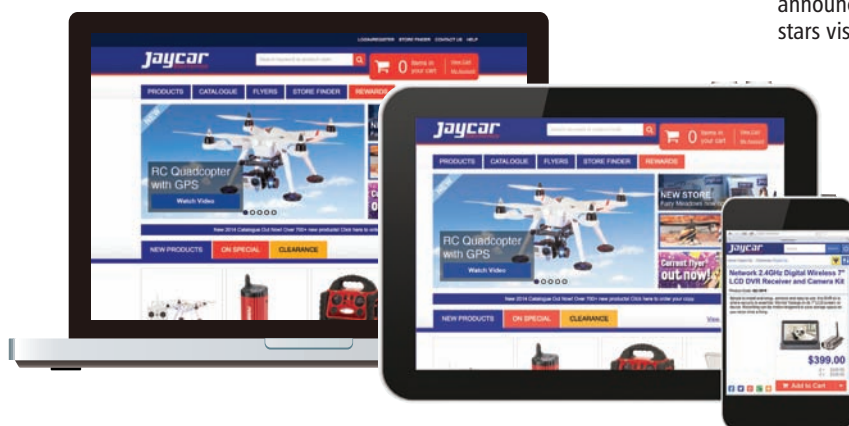
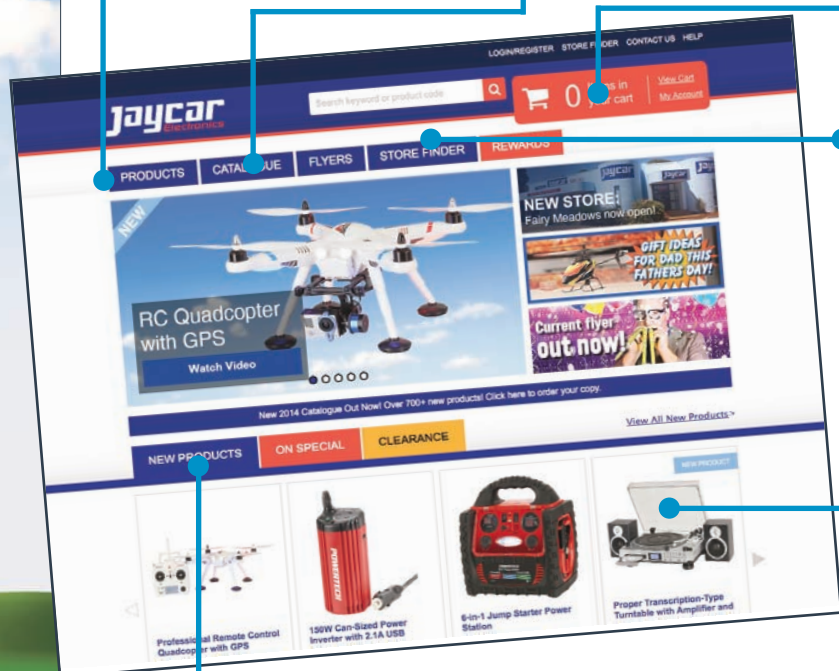
This website is also an unlimited library of multimedia resources. Find out more about products and technologies not only in text, specifications and data manuals, but also in high resolution pictures and demonstrative videos. Look out for the video icons in this catalogue to see the products in action!

WATCH THIS SPACE!

Watch this space closely as we constantly update it with new products, latest promotions and clearance sales. You will also see special events and important announcements on the page such as sporting stars visiting your local stores!

SIZE DOES NOT MATTER!

Our new website is fully scalable so whether you are using a PC or Mac on the desk, or a Tablet on the couch or even a Smartphone on the go, they are always 100% compatible with full functionality.



www.jaycar.com.au

LET'S POINT YOU TO THE RIGHT PAGE...

Hardcore Electronics

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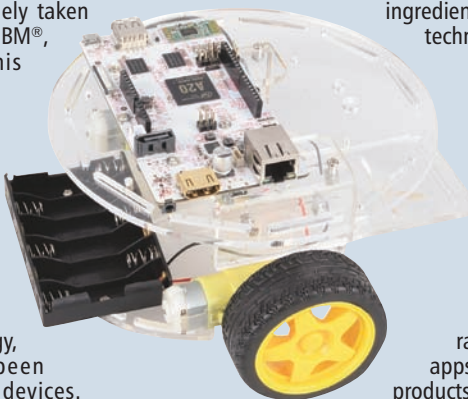
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LET'S READ THE ARDUINO STORY

Personal computers started out as hobby products. Indeed Steve Wozniak started out as a computer hacker in the '70's in what is now known as Silicon Valley, South of San Francisco in California. His partnership with Steven Jobs quickly "corporatised" their hobby computer into the famous Apple® computer product.

For a while Personal Computers were largely taken over by the likes of the big guys, Apple®, IBM®, Compaq®, Hewlett-Packard® etc and this situation is largely the dominant position in the world today. They created an explosion in the imaginative applications for PCs and by extension mobile phones that we live with and love every day.

Ironically, the sheer power of the microprocessor technology has created an opportunity for simple Printed Circuit Board computers to re-emerge as Do-It-Yourself Hobby computers. Like all technology, acronyms and special words have been developed to define and describe these devices. Many people all over the world recognised that the ICs developed for the manufactured PCs could be used in smaller systems. For example, the powerful microprocessors had models that could be easily adapted to work at a smaller scale. Likewise, memory, input/output and other interface ICs could be adapted as well. And along came the USB interface! This was not only fantastic for full-scale PCs, it was extremely useful for the board level device.



Many board level devices were developed, including PICAXE in the UK, Parallax in the US, and others. In Italy a group in Padua developed a board (which in industry speak is called a 'Platform').

Just like Apple® was the magic formula in PCs, this platform which is called Arduino encompassed all of the magical ingredients that made it reach a critical mass of technical acceptance.

Just like your mobile phone or computer is only as useful as the apps that support it, Arduino has reached a position where it is supported with literally hundreds (probably thousands) of apps.

Jaycar has made a major step this year in re-configuring our hardcore hobby/kits area to accommodate the expanding range of support products (really hardware apps) for the benefit of the hobbyist (These products are called 'shields' in the vernacular).

We are very excited about this phenomenon!

The various Departments of Education in each state have become interested. Don't be surprised if this activity does not form part of a formal educational curriculum soon.

LET'S FIND EVERYTHING YOU NEED!

PROGRAMMING ARDUINO: GETTING STARTED WITH SKETCHES

This entry level book explains what an Arduino microcontroller actually is (i.e. a very small stand alone computer), introduces you to the Arduino programming language (called, "C") and then describes the basic configurations of Arduino modules. After this, the book really begins. It then goes into the detail of getting Arduino's to deal with the real world, finishing with a discussion on C++ and more sophisticated applications.

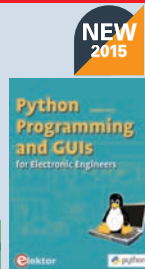
- Soft cover, 162 pages.
- 138 x 215mm



PYTHON PROGRAMMING AND GUIs

This book is aimed at engineers, scientists and hobbyists who want to interface PCs with hardware projects using graphic user interfaces. The book covers both desktop and web based applications. It guides you through starting with Linux® by way of a free downloadable, live bootable distribution that can be ported around different computers without requiring hard drive installation. Practical demonstration circuits and downloadable, full software examples are provided that can be the basis for further projects. It also shows you how you can customize your own live Linux® bootable CD to include your own projects.

- Soft cover, 224 pages. 235 x 170 x 14mm



↑	Cat.	Qty 1+
	BM-7133	\$17.95

↑	Cat.	Qty 1+
	BT-1380	\$49.95

LET'S INTRODUCE YOU TO pcDUINO

Introducing the pcDuino by duinotech! Like its ageing rival, the Raspberry Pi, the pcDuino is a versatile single board computer. Unlike the Raspberry Pi, there is no need to go through the tedious process of preparing a boot SD Card, the pcDuino has a 4GB onboard flash drive that comes pre-loaded with Ubuntu Linux. While you don't need an SD Card, there is a microSD socket available for extra storage. If you don't want Ubuntu, you can replace it with Android operating system. If, however, you need some serious storage space, the pcDuino sports a SATA connector so you can attach a full size HDD.

The most interesting feature, is the Arduino style header that allows you to connect Arduino shields*. Six Analog inputs and two PWM outputs make for even extra



versatility. The pcDuino comes preloaded with XBMC-Media Centre. Add a HDD and a wireless keyboard & mouse (such as XC-4943) and you have a great media centre ready to go. Of course 10/100 Ethernet and HDMI are standard. Two versions are available: pcDuino v3 and pcDuino NANO

***CAUTION:** Unlike the Arduino, the pcDuino operates at 3.3V not 5V. If you want to connect a shield with 5V logic, you must use a voltage step down shield (XC-4362). The Arduino header on the pcDuino still supplies 5V to power your shields, but all inputs must be at or below 3.3VDC.

PCDUINO V3.0 - XC-4350

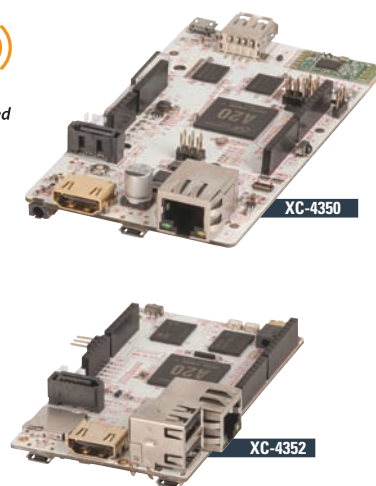
The latest version of the pcDuino single-board-computer. This is the full size pcDuino board and includes the LVDS connector to connect an LCD touch screen (XC-4356). Wi-Fi capability is built in to this version and digital audio is supported via I²C. Ideally suited for creating a wireless media center.

pcDuino

NEW
2015

PCDUINO V3.0 NANO - XC-4352

This version of the pcDuino is substantially smaller than its brother. By omitting the Wi-Fi module, this version occupies much less space. Useful in situations where space is at a premium, or when Wi-Fi is not required. Of course, wired Ethernet is still included at full 1Gbps speed.



Specifications	pcDuino3 (XC-4350)	pcDuino Nano (XC-4352)
CPU	AllWinn A20 SoC	AllWinner A20 SoC
GPU	Mali 400 Dual Core	Mali 400 Dual Core
RAM	1GB	1GB
Storage	4GB on board flash	4GB on board flash
Storage Expansion	microSD slot, SATA port	microSD slot, SATA port.
Ethernet	10/100Mbps	10/100/1000Mbps
Wi-Fi	802.11b/g	No
GPIO pins	14	14
ADC pins	6	6
PWM pins	2	2
Communication	SPI, I ² C, UART	SPI, I ² C, UART
USB	1 x Host + 1 x OTG	2 x Host + 1 x OTG
Video Output	HDMI, LVDS connector for LCD display (XC-4356)	HDMI
Analog Audio	3.5mm stereo audio socket	3.5mm stereo audio socket
Digital Audio	Yes, via I ² C	No
Default OS	Ubuntu Linux (Supports Android®)	Ubuntu Linux (Supports Android®)
Power Supply	5VDC 2000mA (via Micro-USB)	5VDC 2000mA (via Micro-USB)
Dimensions	121(L) x 65(W) x 15(H)mm	92(L) x 54(W) x 15(H)mm

	Cat.	Qty 1+	Qty 5+
pcDuino V3.0 with Wi-Fi	XC-4350	\$119.00	\$106.95
pcDuino V3.0 Nano	XC-4352	\$89.95	\$80.95

7" LCD TOUCH SCREEN MONITOR TO SUIT XC-4350 PCDUINO

This is a custom made 7" LVDS colour LCD with capacitive touch for pcDuino3 (XC-4350). It has a resolution of 1024x600, and comes with an LVDS screen with driver board, a ribbon cable and 10 pieces of male to female jumper wires.

- Resolution: 1024 x 600
- Dimensions: 167(L) x 107(W) x 4(D)mm

Note: pcDuino not included



NEW
2015

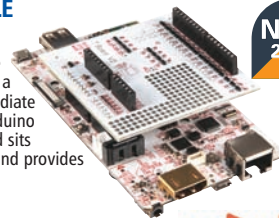
	Cat.	Qty 1+	Qty 5+
7" LCD	XC-4356	\$139.00	\$124.95

VOLTAGE CONVERTER MODULE FOR PCDUINO

While most Arduino shields run at 5V, the pcDuino runs at 3.3V. Directly connecting a 5V shield to the pcDuino will cause immediate damage. This shield safely marries 5V Arduino shields with the 3.3V pcDuino. This shield sits between the pcDuino and the 5V shield and provides bi-directional voltage translation.

- Dimensions: 70(L) x 50(W) x 4(D)mm

Note: pcDuino not included



NEW
2015

	Cat.	Qty 1+	Qty 4+
Voltage Converter	XC-4362	\$29.95	\$26.95

LET'S FIND EVERYTHING YOU NEED

ENCLOSURES TO SUIT PCDUINO V3.0 & V3.0 NANO

House your pcDuino in one of these enclosures for a safe and presentable appearance



Product may vary from one shown

pcDuino

	Cat.	Qty 1+	Qty 5+
Black to Suit XC-4350	XC-4354	\$19.95	\$17.70
Black to Suit XC-4352	XC-4355	\$19.95	\$17.95

GETTING STARTED WITH PCDUINO BOOK

This book helps you to get started with pcDuino 3. It explains all the basic elements of the pcDuino3 with step-by-step procedures. The book is rich with code samples to illustrate how to use pcDuino3.

- Preparing development
- Basic configuration for Ubuntu NAND Linux
- pcDuino3 Programming Language: C/C++ , Python, Java, .NET Mono (C#), Node.js
- Deploying LAMP (Linux, Apache, MySQL & PHP)
- Working with Arduino IDE Software
- pcDuino3 I/O Programming using Python
- Serial Debugging on pcDuino3
- Working with XBee IEEE 802.15.4
- Reflashing Ubuntu NAND

pcDuino BOOK



NEW
2015

	Cat.	Qty 1+
Softcover	BM-7120	\$29.95

DUINOTECH INTRODUCTION

IDEAS IT, IBUILD IT, IUSE IT™

At the heart of who we are at Jaycar is a love of technology and being able to make it affordable for everyone. Arduino fits well with us. We love the accessibility and flexibility of this concept.

About 12 months ago we gave our Buyers the brief to expand our range of Arduino compatible boards - modules, shields and platforms and to make sure it was affordable.

We're happy to say Israel (our Group Sourcing Manager) delivered a massively extended range.

duinotech

Normally our Buying Team test new products in-house themselves but with this new very specialised range we recruited two of our most experienced Arduino Users from our Jaycar Store Network, David (Newcastle, NSW) and Chris (Fairy Meadow, NSW), to come to HQ for over

a week to review, test and write copy on this new range (also the pcDuino). They suggested a few additions to complement the range and they gave it the thumbs up! (A big thank you to David and Chris - your thoughts, suggestions and copy writing is much appreciated.)

So here it is our **duinotech** range...

Over to you to design it, build it, and use it!

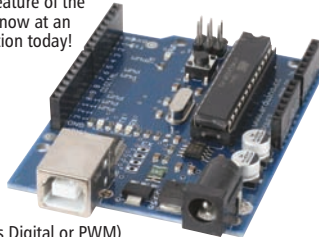
DUINOTECH CLASSIC (UNO)

The flagship of our duinotech family, the duinotech Classic is a 100% Arduino® Compatible development board. Its stackable design makes adding expansion shields a piece of cake. Powered from 7-12VDC or from your computer's USB port. In the past few years the Arduino® has taken the electronics world by storm. Everyone from hobbyists to professional engineers is making use of its limitless versatility. And it's not just for tech-heads; it's easy to learn programming has made the Arduino® a hit with artists and educators as well. Jaycar is proud to add the duinotech to our line-up. Providing every feature of the Arduino® UNO and the Freetronics-Eleven, now at an even lower price! Join the Arduino® revolution today!

**NEW
2015**

Fully Arduino® UNO Compatible

- ATmega328P Microcontroller
 - Program Memory: 322kB (2KB used by bootloader)
 - EEPROM: 512 bytes, SRAM: 2KB
 - Speed: 16MHz
- ATmega16u2 USB-Serial Chipset
- IO:
 - Digital IO: 14 pins (6 are configurable as Digital or PWM)
 - PWM Capable: 6 pins, Analog Inputs: 6 pins
 - Serial Ports: 1 (more supported via SoftwareSerial library)
- Input voltage:
 - 5VDC Regulated via USB port or 5V pin, 7-14VDC via Vin pin
 - On-board regulator supplies 5V when unit is powered via Vin pin
- USB cable included
- Dimensions: 75(W) x 53(L) x 13(H)mm



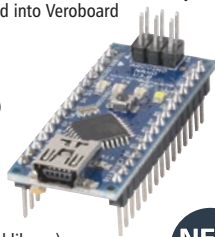
duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4410	\$29.95	\$26.95

DUINOTECH NANO

This is the most breadboard friendly Arduino®-Compatible device you will find. Despite its small size, it packs virtually all the features of the full duinotech boards into a tiny DIP-style board that drops directly into your breadboard. It uses exactly the same ATmega328 chip as its larger cousins, so there is no need to change any of your coding. A Mini-B-USB port is easily accessible on top of the board for programming and serial communication. LEDs show power and serial status and a reset button is easily accessible. Its small DIP-style makes it easy to embed into Veroboard or custom PCBs for more advanced projects.

- Fully Arduino® and duinotech Compatible
- ATmega328P Microcontroller
 - Program Memory: 32kB(2kB used by bootloader)
 - EEPROM: 512 bytes, SRAM:2kB, Speed: 16MHz
- FT232RL USB-Serial Chipset
- IO:
 - Digital IO: 14 pins (6 are configurable as Digital or PWM)
 - PWM Capable: 6 pins, Analog Inputs: 6 pins
 - Serial Ports: 1 (more supported via SoftwareSerial library)
- Input voltage:
 - 5VDC Regulated via USB port or 5V pin, 7-14VDC via Vin pin
 - On-board regulator supplies 5V when unit is powered via Vin pin
- USB cable included
- Dimensions: 46(L) x 18(W) x 18(H)mm



**NEW
2015**

duinotech

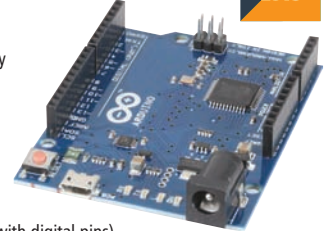
↑	Cat.	Qty 1+	Qty 5+
	XC-4414	\$29.95	\$26.95

DUINOTECH LITE (LEONARDO)

Most of the duinotech models use two chipsets, one for the main controller, one for USB communication. The duinotech Lite combines both these functions into a single IC. This lowers the cost, and opens the door for more advanced USB functions. Now you can have your duinotech Lite emulate a computer keyboard, mouse, joystick and many other types of input device. The duinotech Lite also boasts more analog inputs (12), and an extra PWM channel.

**NEW
2015**

- Fully Arduino® Compatible
- ATmega32u4 Microcontroller
 - Program Memory: 322kB (4KB used by bootloader)
 - EEPROM: 12kB, SRAM: 2.52kB
 - Speed: 16MHz
- Built in USB-Serial
- IO:
 - Digital IO: 20 pins (7 are configurable as digital or PWM)
 - PWM Capable: 7 pins
 - Analog Inputs: 12 pins (6 are shared with digital pins)
 - Serial Ports: 2 (One USB, one UART, more supported via SoftwareSerial library)
- Input voltage:
 - 5VDC Regulated via USB port or 5V pin
 - 7-14VDC via Vin pin
 - On-board regulator supplies 5V when unit is powered via Vin pin
- USB cable included
- Dimensions: 75(W) x 53(L) x 13(H)mm



duinotech

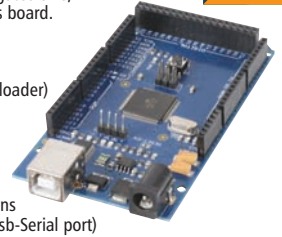
↑	Cat.	Qty 1+	Qty 5+
	XC-4430	\$39.95	\$35.90

DUINOTECH MEGA

This is our most powerful Arduino-Compatible board. Boasting more IO pins, more memory, more PWM outputs, more Analog inputs and more Serial ports, the MEGA is definitely the Leader of the duinotech pack. When you have a project that just needs more inputs, outputs & memory than the duinotech Classic (Uno) can deliver, the MEGA has them in spades. And with 8x the program memory, you have the room to write much larger programs to take full advantage of the increased IO. Despite its elongated size, standard shields will still drop straight onto this board.

**NEW
2015**

- Fully Arduino® Compatible
- ATmega2560 Microcontroller
 - Program Memory: 265kB (4kB used by bootloader)
 - EEPROM: 4kB, SRAM 8kB, Speed: 16MHz
- ATmega16u2 USB-Serial Chipset
- IO:
 - Digital IO: 54 pins (15 are configurable as Digital or PWM)
 - PWM Capable: 15 pins, Analog Inputs: 16pins
 - Serial Ports: 4 (1 is connected to on-board usb-Serial port)
- Input Voltage:
 - 5VDC Regulated via USB port or 5V pin
 - 7-14VDC via Vin pin
 - On-board regulator supplies 5V when unit is powered via Vin pin
- USB cable included
- Dimensions: 108(W) x 53(L) x 15(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4420	\$49.95	\$44.90

TECH TALK!

ABOUT SCRATCH AND S4A

Scratch is an easy to learn technology language designed by MIT Media Labs and is mainly intended to introduce programming to children aged 7 to 16. The Arduino community have modified Scratch and created S4A. S4A allows for simple programming of the Arduino open source hardware platform. It provides new blocks for managing sensors and actuators connected to Arduino.

Arduino objects offer blocks for the basic microcontroller functionalities, analogue and digital writes and reads, and also for higher level ones. In S4A, an Arduino board is represented by a special kind of sprite. The Arduino sprite will automatically find the USB port where the board is connected. It is possible to connect to multiple boards at the same time by just adding a new Arduino sprite.

Components have to be connected in a particular way. S4A allows for 6 analog inputs (analog pins), 2 digital inputs (digital pins 2 and 3), 3 analogue outputs (digital pins 5, 6 and 9), 3 digital outputs (pins 10, 11 and 13) and 4 special outputs to connect Parallax continuous rotation servomotors (digital pins 4, 7, 8 and 12). A board can be managed wirelessly by attaching an RF module to it, such as Xbee. S4A allows control of many boards as USB ports that are available.



S4A is backwards compatible with Scratch, so you can open Scratch projects in it. However, you won't be able to share your projects on the Scratch community website because doing so goes against the Scratch terms of use.

ARDUINO COMPATIBLE BOARDS

Arduino compatible boards provide the basis for your Arduino project. They include the microcontroller & a variety of I/O options, so you can choose to suit your requirements.

ETHERMEGA: A Mega sized EtherTen for big projects, with more I/O pins, more flash memory and RAM, plus a switchmode power supply and all the same embedded Ethernet and features of the EtherTen.

USBDRUID: With an on-board USB Host system, this board can interface with Android mobile phones and Tablets for control and display, and other USB devices like GPS Receivers, some digital cameras, barcode scanners, keyboards and more.

LEOSTICK: A pocket sized USB board with most of the pins of the Eleven plus an on-board speaker, controllable RGB Colour LED, pin sockets and plug it directly into your USB port!

STEPDUINO: With two onboard stepper motor controllers, a servo controller, and a 20x4 LCD, this board is ideal for robotics and other Mechatronics projects. Drive stepper motors straight from your controller!

STEPDUINO ARDUINO COMPATIBLE

A complete, self-contained Arduino-compatible board with onboard stepper motor drivers, servo interface, micro-SD card slot, and 20x4 character LCD. Perfect for building robots or other mechatronics projects: just connect up stepper motors and go! Even includes an interface for a commonly available Nintendo DS touch screen (not included) that can be fixed over the LCD or mounted beside it.

- ATmega328P MCU running the Arduino bootloader
- ATmega16u2 MCU for USB-serial connection
- 2 x stepper motor controllers suitable for 4-wire bipolar steppers
- 2 x servo controller outputs
- 20x4 LCD
- Breakouts for I²C, UART, and analog / digital pins: perfect for limit switch connections or additional sensors
- Breakouts for touchscreen connection (not included)
- Micro USB socket for programming - even comes with a micro USB cable included in the box!
- microSD card slot
- Switchmode power supply
- Program it using the Arduino IDE
- Dimensions: 113(W) x 74(H) x 25(D)mm



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↑	Cat.	Qty 1+	Qty 5+
	XC-4249	\$149.00	\$133.95

ETHERMEGA, MEGA SIZED ARDUINO 2560 COMPATIBLE WITH ETHERNET

The ultimate network-connected Arduino-compatible board: combining an ATmega2560 MCU, onboard Ethernet, a USB-serial converter, a microSD card slot for storing gigabytes of web server content or data, Power-over-Ethernet support, & even an onboard switch-mode voltage regulator so it can run on up to 28VDC without overheating! Amazing.

- ATmega2560 MCU running at 16MHz
- 10/100base-T Ethernet built in
- Can be used as a web server, remote monitoring and control, home automation projects and any projects which benefit from many control pins
- Power-over-Ethernet support with optional module
- 54 digital I/O lines
- 16 analog inputs
- MicroSD memory card slot
- Prototyping area
- Switchmode power supply
- Dimensions: 105(W) x 54(H) x 19(D)mm



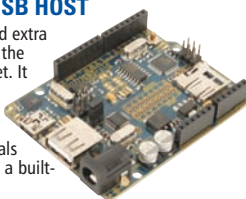
freetronics

↑	Cat.	Qty 1+
	XC-4256	\$119.00

USBDRUID WITH ONBOARD ANDROID/USB HOST

Just like a Freetronics Eleven but with a microSD slot and extra USB port designed to connect with Android devices like the HTC Desire and Nexus mobile phones or the Xoom tablet. It is specially designed to be compatible with the Android Open Accessory Development Kit so you can write software to get the phone and USBDruid to talk to each other, enabling you to build your own Android peripherals to connect your phone to whatever you like. It even has a built-in charger to recharge the Android device.

- USB (A to Mini B) cable included for PC connection
- USB cable for connection to Android device required
- PCB dimensions: 68(L) x 53(H) x 19(H)mm



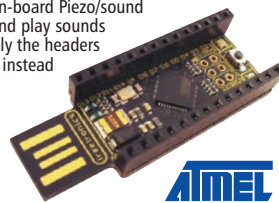
freetronics

↑	Cat.	Qty 1+
	XC-4222	\$69.95

LEOSTICK (ARDUINO COMPATIBLE)

The very popular LeoStick is a tiny Arduino-compatible board that's so small you can plug it straight into your USB port without requiring a cable! Even with its tiny size it has a full range of analogue and digital I/O just like its larger cousins, and also has a user-controllable RGB LED on the board and an on-board Piezo/sound generator so you can make your board light up and play sounds without any extra hardware at all! We don't supply the headers pre-soldered in case you wish to use header pins instead (available separately).

- ATmega32u4 MCU with 2.5k RAM and 32k Flash
- 6 analogue inputs (10-bit ADC) with digital I/O, 14 extra digital I/O pins
- Includes a getting started guide and header sockets for plug-in modules and projects.
- Compatible with the Arduino IDE
- User-controlled RGB LED
- Built in Piezo sound speaker
- Dimensions: 49(W) x 19(H) x 8(D)mm (11mm including header sockets)



AMEL

FOR LEOSTICK PROTOTYPING SHIELD SEE PAGE 25

freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4266	\$34.95	\$31.45

OLED STICK FOR ARDUINO

Use the OLED Stick to combine the tiny LeoStick Arduino-compatible board (XC-4266) with the 128x128 pixel OLED module (XC-4270) to create your own project with an amazing graphic display.

- Connects the 128x128 pixel OLED module to your LeoStick using the supplied cable
- Prototyping area to add your own parts
- Breakouts for all LeoStick I/O pins
- Dimensions: 45(W) x 19(H) x 16(D)mm



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Note: OLED module and LeoStick sold separately

↑	Cat.	Qty 1+	Qty 5+
	XC-4245	\$15.95	\$14.35

ATMEGA328P MCU WITH ARDUINO UNO BOOTLOADER

An ATMEGA AVR ATmega328P microcontroller for you to build your very own customised Arduino compatible projects. For your convenience it comes with the Arduino Uno bootloader pre-installed and features a special label on top which details the pinouts.

- Includes 16MHz crystal oscillator
- 23 programmable I/O lines
- 6-channel ADC
- 0 - 4MHz @ 1.8 - 5.5V,
- 0 - 10MHz @ 2.7 - 5.5V,
- 0 - 20MHz @ 4.5 - 5.5V
- 28-pin DIP format for easy use in breadboards or Arduino compatible boards



AMEL

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↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZZ-8726	\$12.95	\$11.35	\$8.95

EXPERIMENT KITS

ARDUINO COMPATIBLE EXPERIMENTERS KIT

Servo motor, lights, buttons, switches, sound, sensors, breadboard, wires and more are included with a Freetronics Eleven Arduino compatible board in this extensive hobby experimenter, inventor and starter kit. Complete with some great instructions and a supporting web page and software examples, this is everything you need to get started for a fun range of electronics and Arduino related projects.

- No soldering required
- Instructions for many educational and fun projects included
- Supplied in a presentation box
- Dimensions: 340(W) x 165(H) x 36(D)mm



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↑	Cat.	Qty 1+	Qty 5+
	XC-4262	\$89.95	\$80.95

EXPERIMENT KITS FOR ARDUINO

Looking to get into Arduino but don't quite know where to start? Our range of experiment kits are the answer. Each kit contains a duinotech board, a breadboard, jumper wires and a plethora of peripherals. Each kit comes in a plastic organiser. See below for a comparison of our different offerings.

DUINOTECH NANO KIT

- 1 x duinotech Nano
- 1 x Nano to full-size adapter shield.
- Assorted Jumpers
- Assorted Resistors
- 2 x Light Dependant Resistors
- 1 x IR Remote Receiver
- 4 x Tactile Switches
- Assorted LEDs
- 1 x Seven Segment Display
- 1 x 50k Potentiometer
- 1 x Solderless breadboard



NEW
2015

↑	Cat.	Qty 1+	Qty 3+
	XC-4285	\$79.95	\$71.95

DUINOTECH MEGA KIT

- 1 x duinotech MEGA
- 1 x Solderless breadboard
- USB Cable
- 1 x 4 Digit Seven Segment Display
- 1 x 1 Digit Seven Segment Display
- 1 x 8x8 Dot Matrix Display
- 1 x 6AA battery holder
- Assorted Resistors
- Assorted LEDs
- RGB LED Module
- 4 x Tactile switches
- 2 x Piezo Sounders
- Assorted Jumpers
- 1 x 74HC595 Shift Register
- 1 x 50k Potentiometer
- 2 x Light Dependant Resistors
- 1 x Infrared Photo Diode
- 1 x Infrared Remote Receiver
- Analog Temperature Sensor
- 1 x 17 Button IR remote control
- 1 x Solderless breadboard.
- 1 x 40-pin header
- 1 x Two channel relay module
- 1 x 2x16 LCD Display



NEW
2015

↑	Cat.	Qty 1+	Qty 3+
	XC-4286	\$89.95	\$80.95

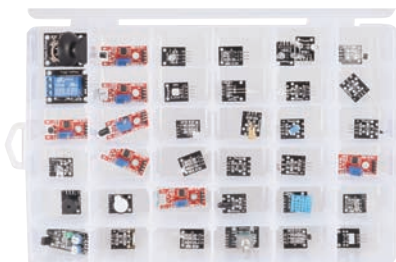
DELUXE MODULES PACKAGE

With 37 different sensors and modules, this kit covers just about every input and output you can poke a soldering iron at. Packaged in a clear plastic organiser.

Contains:

- Joystick Module
- Relay Module
- Small Microphone Module
- Large Microphone Module
- Line Tracking Sensor
- Obstacle Avoidance Sensor
- Flame Sensor Module
- Hall Effect Sensor
- Touch Sensor
- Digital Temperature Sensor
- Buzzer Module
- Passive Buzzer/Sounder
- RGB LED Module
- SMD RGB LED Module
- Two Colour LED Module
- Reed Switch Module
- Mini Reed Switch Module
- Heartbeat Sensor
- Seven Colour Flashing LED Module
- Laser Module
- Tactile Switch Module

- Shock Sensor
- Rotary Encode Module
- Tilt Switch Module
- Ball Switch Module
- Light Dependant Resistor Module
- Temperature and Humidity Module
- Digital Temperature Sensor
- Analog Temperature Sensor
- IR Transmitter Module
- IR Receiver Module



NEW
2015

↑	Cat.	Qty 1+	Qty 3+
	XC-4288	\$129.00	\$115.95

MODULES & SHIELDS - ETHERNET

ARDUINO® COMPATIBLE ETHERNET SHIELD

A network shield that will allow the user to set their Arduino® up as web server, control your project over your network or even allow your Arduino® to connect to the World Wide Web.

- 10/100Mb Ethernet port
- Reset button
- microSD card slot
- Stackable headers
- Dimensions: 69(L) x 48(W) x 14(H)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4412	\$29.95	\$26.95

ARDUINO COMPATIBLE ETHERNET INTERFACE MODULE

Contains all the circuitry required to implement a complete Ethernet interface. Use this with your latest duinotech project to send and receive email or host its own website!

- Operating Voltage: 3.3V
- Ethernet Mode: 10Base-T
- Connection Protocol: SPI
- Dimensions: 160(L) x 60(D) x 15(H)mm



NEW
2015

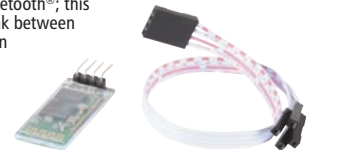
↑	Cat.	Qty 1+	Qty 5+
	XC-4436	\$14.95	\$13.45

MODULES & SHIELDS - BLUETOOTH®

ARDUINO COMPATIBLE BLUETOOTH® MODULE

Do you want to communicate wirelessly with your duinotech project, but don't want the hassle of configuring RF modules? Well this module with Bluetooth® technology is the answer. Connected to your duinotech via the serial pins, and to your computer via Bluetooth®; this module creates a seamless serial-port link between you and your Duino®. Better still, you can use it to communicate with your Bluetooth® enabled Smartphone.

- Chipset: BC417
- Protocol: Bluetooth® V2
- Operating Voltage: 3.3V
- RF Power: 6dBm
- Dimensions: 28(W) x 13(L) x 8(H)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4510	\$19.95	\$17.95

MODULES & SHIELDS - WIRELESS

ARDUINO COMPATIBLE RF TRANSCIVER MODULE

This module adds a versatile 433MHz radio to your duinotech project. Capable of transmitting and receiving over a wide frequency range, these modules allow two-way wireless communication between duinotechs. Controlled via SPI. Prewritten libraries available.

- Operating Voltage: 1.9-3.6VDC
- Frequency Range 433/898/915MHz
- Maximum Data Rate: 50kbps(with error correction)
- RF output power: 13dBm(20mW)
- Connection protocol: SPI
- Includes antenna.
- Dimensions: 32(W) x 19(L) x 19(H)mm (Excluding antenna)



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4522	\$19.95	\$17.95

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here!
Check our website for over 3,500 pages of data!

MORE INFO
WEB

MODULES & SHIELDS - WIRELESS (CONTINUED)

2.4GHZ RF MODULE

Based on the NRF24L01 transceiver IC, this module allows communication on the license free ISM band. Despite its diminutive size, it supports on-air data rates of up to 2Mbps. No external components are required (other than your Duino®).

- Operating Voltage: 3.3V (5V tolerant logic)
- Output Power: 1mW
- Chipset: NRF24L01
- Ultra low power consumption
- Protocol: SPI
- Dimensions: 33(L) x 14(W) x 9(H)mm



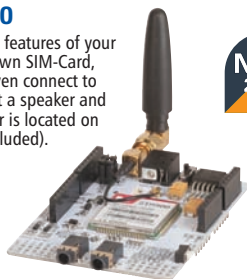
NEW 2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4508	\$9.95	\$8.75

GPRS/GSM SHIELD FOR ARDUINO

This powerful Arduino shield contains all the features of your average mobile phone. Once you add your own SIM-Card, you can make phone calls, send SMS, and even connect to the Internet! Two 3.5mm audio jacks connect a speaker and microphone for voice calls. A SIM-card holder is located on the underside of the board (SIM-Card not included).

- Quad-Band 850/900/1800/1900MHz
- SIM900 Chipset
- Includes SMA Antenna
- Protocol: AT-Commands via Serial/UART
- Dimensions: 85(W) x 57(D) x 18(H)mm (Excluding Antenna)



NEW 2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4221	\$129.00	\$115.95

GPS MODULE

A versatile GPS receiver with integrated Real Time Clock. Based on the GTPA013 GPS receiver, this module boasts one of the shortest TTFF (Time-To-First-Fix) presently available on the market. This means less waiting time between power up, and obtaining a position-fix. You can also use this module to obtain a super accurate time reference from the GPS system, and a built in battery retains this time data even when power is removed. The module also provides a super accurate 1PPS (pulse per second) clock source with just 10ns jitter! Operating at 3.3V, this module has an on board regulator, enabling it to run from 3.5-6VDC. While the logic level is 3.3V, it is 5V tolerant: meaning it can be directly connected to your duinotech.

- Operating Voltage: 3.3VDC
- Supply Voltage: 3.6-6VDC
- Logic Level: 3.3VDC (5V Tolerant)
- Communication Protocol: Serial(UART TTL)
- Internal Real Time Clock with battery backup
- Built-in ceramic antenna
- Dimensions: 31(W) x 28(L) x 10(H)mm



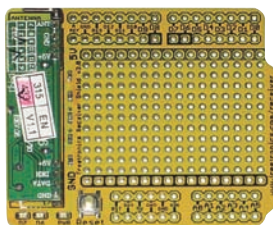
NEW 2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4223	\$89.95	\$80.95

433MHZ RECEIVER SHIELD FOR ARDUINO

Add a receiver module to your Arduino project to receive signals from wireless devices including weather stations, home automation remote controls, power consumption meters, car alarms, and also many DIY projects that transmit on 433MHz. Supplied with RXB6 433MHz receiver module. Described in Practical Arduino Book BM-7132

- Fully pre-assembled except for headers
- Includes stackable headers that you can solder in place
- Red and green debugging LEDs to display signal reception status
- Red and green SMD LEDs with current limiting resistors
- Reset button wired through to Arduino reset pin
- Blue power LED
- Power supply smoothing capacitors
- Huge prototyping area where you can add your own parts
- Clearly marked GND and 5V rails
- Printed PCB overlay on both sides
- Gold-plated surface for easy soldering
- Dimensions: 60(L) x 54(W) x 9(D)mm



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↑	Cat.	Qty 1+
	XC-4220	\$29.95

ARDUINO COMPATIBLE WI-FI SHIELD

Finally it's here, a Wi-Fi shield for Arduino! Utilising the CC3000 Wi-Fi chipset from Texas Instruments, this shield is robust yet simple to use. Supporting all of the most popular Wi-Fi standards, connecting your project to the Internet has never been so easy.

- Operating Voltage: 5VDC (Supplied by the Arduino)
- Chipset: CC3000
- Wi-Fi Modes: 802.11b/g
- Security: Open, WEP, WPA, WPA2, TKIP, AES
- Interface: SPI
- Software libraries available
- Dimensions: 60(W) x 53(L) x 20(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4225	\$99.95	\$89.95

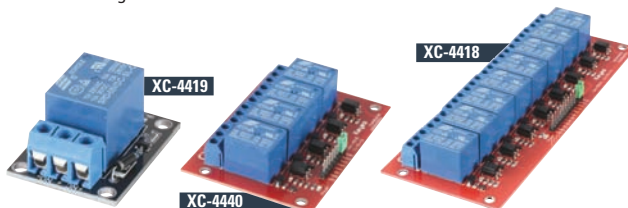
MODULES & SHIELDS - RELAYS

ARDUINO® COMPATIBLE RELAY BOARDS

These handy relay modules provide the easiest way to use your duinotech to switch real world devices. Available in one, four and eight channel versions, these modules can switch up to 10A per channel. Includes back-EMF protection and LEDs so you can easily see the state of the outputs. The four and eight channel versions even have optical isolation to protect your duinotech. While the one channel version operates directly from 5V.

- Status LEDs show channel status
- Active High logic
- Screw terminals for easy connection to relay contact.
- SPST Relays
- Current Ratings:
10A @ 250VAC
10A @ 30VDC
- Four mounting holes on each module

NEW 2015



duinotech

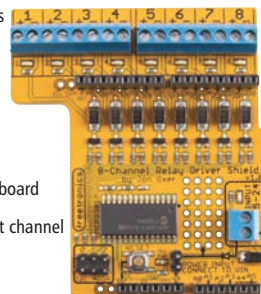
Cat.	Channels	Supply Voltage	Optical Isolation	Dimensions
XC-4419	1	5VDC	NO	40(W) x 27(D) x 18(H)mm
XC-4440	4	12VDC	YES	77(W) x 55(D) x 17(H)mm
XC-4418	8	12VDC	YES	135(W) x 50(D) x 19(H)mm

↑	Channels	Cat.	Qty 1+	Qty 5+
	1	XC-4419	\$4.95	\$4.45
	4	XC-4440	\$9.95	\$8.75
	8	XC-4418	\$19.95	\$17.95

8 CHANNEL RELAY DRIVER SHIELD FOR ARDUINO

Drive up to 8 relays from your Arduino using just 2 I/O pins with this shield. It communicates with your board using I²C, so you can even stack several shields together to drive 16, 24, or more outputs! Includes back-EMF protection and works with a wide range of relays. Perfect for home automation projects when combined with relay SY-4052 and DIN-rail relay mounting base SY-4063.

- Plugs straight into your Arduino-compatible board
- Just 2 I/O pins required to control 8 outputs
- Individual LED status display on every output channel
- LED status displays for host power and external power
- Drive relay coils of 5V to 24V (with external power supply)
- Suggested relays like SY-4052 are rated at 2 x 5A @ 240VAC
- Dimensions: 52(L) x 66(W) x 12(D)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4276	\$34.95	\$31.45

MODULES & SHIELDS - IR

ARDUINO COMPATIBLE INFRARED OBSTACLE AVOIDANCE SENSOR MODULE

This module is an inexpensive solution for an obstacle avoidance sensor, perfect for robotic projects and very easy to interface directly with Arduino® and compatible boards. It also works with our pcduino module by using the 3.3V output. The module has two potentiometers one to control frequency and the other to control the intensity.

- 5VDC operation
- Adjustable frequency and intensity
- 4 pin header
- Dimensions: 42(L) x 27(W) x 18(H)mm



duinotech

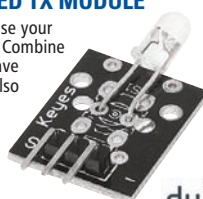
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4524	\$9.95	\$8.75

ARDUINO COMPATIBLE INFRARED TX MODULE

Use this device to send data over infrared. Use your Arduino to control your TV or Media Centre. Combine it with our RX module (XC-4427) and you have simple wireless communication. You could also use it to control one of our infrared RC helicopters!

- Operating Voltage: 5VDC



duinotech

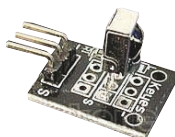
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4426	\$3.95	\$3.45

ARDUINO COMPATIBLE INFRARED RX MODULE

Receive data sent via infrared, this module can read the signals sent by most IR remote controls. Pair it with the TX Module (XC-4426) to make a universal remote control.

- Operating Voltage: 5VDC



duinotech

NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4427	\$3.95	\$3.45

ARDUINO COMPATIBLE PIR MOTION DETECTOR MODULE

A pyroelectric infrared PIR motion sensor is a handy addition to any Arduino® project. Wide operating range and delay times changeable via two potentiometers giving this module versatility to the user, it is a must for any security application.

- Working voltage: 5-20VDC
- Quiescent current: 65uA
- Level output voltage: High 3V / Low 0V
- Delaying time 0.3-18s
- Dimensions: 32(L) x 24(W) x 25(H)mm



duinotech

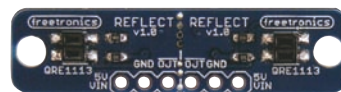
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4444	\$4.95	\$4.45

DUAL CHANNEL INFRARED REFLECTANCE SENSOR FOR ARDUINO

A pair of infrared reflectance sensors mounted on one PCB, spaced just the right distance apart to build a line following robot. Easy interface with Arduino. Symmetrical PCB with snapoff holes across the middle, so you can use it as a pair or cut/snap it in half to have two separate reflectance sensors.

- Analogue output shows light or dark surface detected
- Perfect for line following robots
- Easy interface with Arduino
- Dimensions: 37(W) x 9(H) x 3(D)mm



freetrronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4261	\$14.95	\$13.35

MODULES & SHIELDS - RFID

ARDUINO COMPATIBLE RFID READ & WRITE KIT

This RFID module allows you to both read and write MiFare-Type RFID cards. Create your own contactless security lock. Includes two credit-card style tags and one key-fob style tag.

- Operating Voltage: 3.3V
- Communications Protocol: SPI
- RFID Protocol: MiFare
- Includes 3 tags(2 cards, one fob)
- Dimensions: 66(L) x 40(W) x 7(H)mm



duinotech

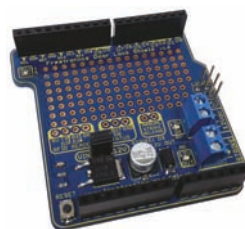
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4506	\$19.95	\$17.95

RFID DOOR LOCK SHIELD FOR ARDUINO

This shield allows your Arduino to control a door lock using an electric strike plate and one of a number of commonly available RFID modules. Based on a project in the book Practical Arduino, which includes extensive documentation. Example source code online.

- Supported readers include ID12, ID20, RDM630, RDM680, HF MultiTag, and many others
- Connections for RFID reader module, external status LEDs, and manual release button (not included)
- Output to control 12V electric door strike
- Power pass-through jumper
- Reset button wired through to Arduino reset pin
- Blue "Arduino power" LED
- Green "External power" LED
- Red "Strike plate activated" LED
- Prototyping area
- Dimensions: 49(W) x 54(D) x 27(H)mm



freetrronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4215	\$34.95	\$31.45

SPECIAL OFFER

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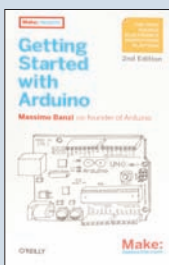


LET'S FIND EVERYTHING YOU NEED!

GETTING STARTED WITH ARDUINO BOOK - 2ND EDITION

The open-source Arduino development platform continues to gain popularity due to the ease of use and low development costs. Now in its second edition this book is aimed at the first-timer and explains what Arduino is, how it works, and what you can do with it. Additional sections include circuits and code to cover the building blocks of development such as digital input and output, analogue sensors, pulse width modulation output, and communications.

- Soft cover 128 pages.
- 216 x 140mm



BOOK

↑	Cat.	Qty 1+
	BM-7131	\$23.95

PRACTICAL ARDUINO

A much larger and detailed book. It takes you beyond the basics quite quickly and shows you how to make up a typical application/design. Examples of typical projects, 14 in all are worked through, ranging from simple to quite complex. This is a necessity as it goes to the heart of Arduino.

- Softcover, 422 pages.
- 235 x 190mm



BOOK

↑	Cat.	Qty 1+
	BM-7132	\$44.95

MODULES & SHIELDS - JOYSTICK

ARDUINO COMPATIBLE XY JOYSTICK MODULE

This handy module gives you X & Y axis control for your Arduino project. The board is interfaced through 5 pin header and provides a small game-style joystick. There is also a tactile switch when you push the stick down.

- Operating Voltage: 3-5VDC
- Digital output for tactile switch.
- X & Y axis analog outputs.
- Dimensions: 47(L) x 25(W) x 32(H)mm



duinotech

NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4422	\$4.95	\$4.45

ARDUINO COMPATIBLE JOYSTICK CONTROLLER SHIELD

Similar to a PlayStation™ Controller, this shield has a two-axis analog joystick with a push down function button and plus another four momentary push buttons. Add a Bluetooth® module and you will have yourself a wireless controller.

- X,Y axis with push down button
- Voltage selectable 3.3V and 5VDC
- Dimensions: 87(L) x 54(W) x 18(H)mm



duinotech

NEW
2015

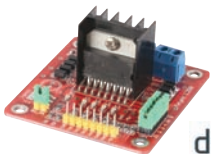
↑	Cat.	Qty 1+	Qty 5+
	XC-4462	\$19.95	\$17.95

MODULES & SHIELDS - POWER

ARDUINO COMPATIBLE DUAL MOTOR CONTROLLER MODULE

Using the powerful L298N Dual Motor Driver, this module allows full control of two DC Motors or one stepper-motor. Features back-EMF and over-temperature protection, it is ideally suited to drive two-motor robot kits such as our KR-3130 and KR-3132. An on-board 5V regulator can also be used to power your project.

- Maximum output current: 4A
- Motor voltage: 3-30VDC
- Screw terminals for easy connections
- LEDs show power and output status
- Requires six digital inputs
- 4 mounting holes
- Dimensions: 69(W) x 56(D) x 36(H)mm



duinotech

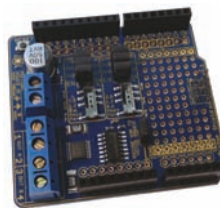
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4492	\$14.95	\$13.45

H-BRIDGE MOTOR DRIVER SHIELD FOR ARDUINO

Directly drive DC motors using your Arduino compatible board and this shield, which provides PWM (Pulse-Width Modulation) motor output on 2 H-bridge channels to let your board control the speed, direction and power of two motors independently. Perfect for robotics and motor control projects.

- Drives up to 2A per motor channel
- All outputs are diode and back-EMF protected
- Dimensions: 60(L) x 54(W) x 12(D)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4264	\$34.95	\$31.45

ARDUINO COMPATIBLE 24V 5A MOS DRIVER MODULE

When connected to an Arduino®, this impressive MOS driver module produces Pulse Width Modulated (PWM) output to drive 24VDC loads. Compatible with both Arduino® and pcduino®, making it perfect for many projects such as lighting, DC motors, pumps and solenoid.

- 3.3V & 5V DC operation
- Output load voltage 0-24VDC
- Output current 5A
- Dimensions: 34(L) x 21(W) x 16(H)mm



duinotech

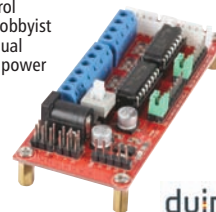
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4488	\$7.95	\$7.15

4WD DC POWER SUPPLY MOTOR DRIVER MODULE FOR ARDUINO

Using a L293D dual H-Bridge DC motor control chipset, this module is one for the robotics hobbyist or professional who needs 4WD with individual motor control. The motors require their own power supply, separate from the Arduino, but they can be any range from 5-16VDC.

- Motor Supply Voltage: 5-16VDC
- Logic Voltage: 5VDC
- Driver peak current 1A
- Dimensions: 92(L) x 38(W) x 17(H)mm



duinotech

NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4460	\$29.95	\$26.95

LET'S FIND EVERYTHING YOU NEED!

ARDUINO WORKSHOP BOOK - 65 PROJECTS

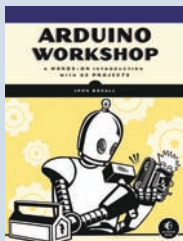
In Arduino Workshop you will learn to make projects that add-on to your Arduino microcontroller platform. The book is very hands-on, describing 65 projects you can make.

Projects include:

- A digital thermometer
- A GPS logger
- A handy voltage tester
- A keypad combination lock
- A binary quiz game and much, much more

Lavishly illustrated with very clear text and lots of professional tips for the novice constructor.

- 370 pages, 180 x 235 Softcover



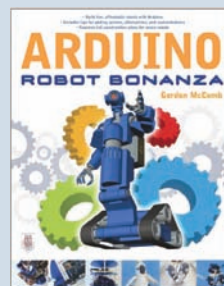
BOOK

↑	Cat.	Qty 1+
	BM-7137	\$34.95

ARDUINO ROBOT BUILDER'S BONANZA

This book guides you through the construction of 7 robots that roll, walk, talk, slither and even sling insults at you. All projects feature the Arduino microcontroller platform. Step-by-step assembly diagrams and instructions provided.

- Soft cover
- 400 pages, 230 x 185mm



BOOK

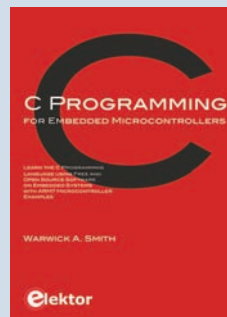
↑	Cat.	Qty 1+
	BM-7136	\$36.95

C PROGRAMMING FOR MICROCONTROLLERS

Never used C before? Well if you've used Arduino, you've used C. The language the Arduino uses is just a slightly modified version of C. Becoming fluent in C programming is key to developing robust and reliable Arduino projects. What's more, pure C can be used to program almost all other microcontrollers too, not to mention your computer. This book starts right from the basics, writing simple programs to run on your pc. And eventually moves on to writing code for microcontrollers. While this book focuses on Atmel's ARM microcontrollers, the skills are equally valid when programming any architecture. Ideal for electronic hobbyists, students and engineers wanting to learn to program C.

- Uses only free or open source software
- Learn how to download, set up and use free C programming tools
- No programming experience is necessary
- Learn by doing - type and run the example programs and exercises
- Sample programs and exercises can be downloaded from the Internet
- A fun way to learn the C programming language
- Soft cover, 320 pages. 234 x 170 x 17mm

This is one of the most lucid, best written technical books we have ever seen!



NEW
2015

BOOK

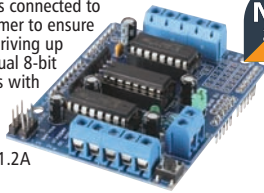
↑	Cat.	Qty 1+
	BT-1384	\$59.95

MODULES & SHIELDS - POWER (CONTINUED)

ARDUINO COMPATIBLE L293D MOTOR CONTROL SHIELD

This versatile board has 2 x 5V servo ports connected to the Arduino® high-resolution dedicated timer to ensure jitter-free operation. It is also capable of driving up to 4 bi-directional DC motors with individual 8-bit speed selection, or up to 2 stepper motors with single/two/interleaved steppings.

- 5V to 36VDC
- 4 H-Bridges: per bridge provides 0.6A (1.2A peak current) with thermal protection
- 2 external terminal power interface
- Dimensions: 70(L) x 53(W) x 20(H)mm



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4472	\$12.95	\$11.35

ARDUINO COMPATIBLE 5V STEPPER MOTOR & DRIVER SET

A small and versatile motor and driver set. 5VDC stepper motor controlled by the ULN2003 driver can be used with any Arduino® or compatible board via jumper leads.

- 5VDC stepper motor
- Stepper motor size: 28mm diameter
- Step angle 5.625 x 1/64
- Reduction ratio 1/64
- LED indicators
- Driver board size: 35(L) x 32(W) x 10(H)mm



NEW
2015

duinotech

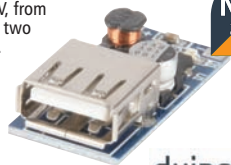
↑	Cat.	Qty 1+	Qty 5+
	XC-4458	\$9.95	\$8.75

5VDC BOOST MODULE

This module is capable of providing a stable 5V, from a single Li-Po or two Alkaline cells. Input is via two solder pads, output is via a female USB socket.

- Input Voltage Range: 2.5-5VDC
- Output Voltage: 5VDC
- Dimensions: 34(L) x 16(W) x 8(H)mm

Note: Batteries not included



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4512	\$4.95	\$4.45

DC - DC BOOST MODULE

This module accepts any voltage from 3-34VDC, and outputs any higher voltage from 4-35VDC. Output is adjusted via a multi-turn potentiometer. Use it to run higher voltages from your lower supply. (ie. run 12V devices from a 5V supply)

- Input voltage 3-34VDC
- Output voltage continuously adjustable 4-35VDC
- Maximum output current 2.5A
- Dimensions: 49(L) x 26(W) x 12(H)mm



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4514	\$7.95	\$7.15

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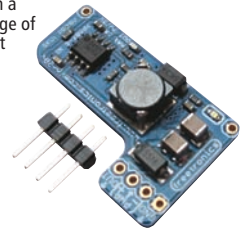
FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

POWER REGULATOR 28V (SWITCHMODE) FOR ARDUINO

This regulator is a high tech switchmode supply with a selectable 5V or 7VDC output. The input voltage range of 6 to 28VDC is very flexible and it will not overheat at higher input voltages like the 7805 and other linear regulators may.

- Up to 1A output current at selectable 5V or 7VDC output voltage
- Can be used in any project as a high current low temperature power supply
- Can also be used for the EtherTen and EtherMega Power-over-Ethernet for efficient switchmode supply remote powering
- Blue power LED
- 0.1" pitch standard header pads
- Dimensions: 21(W) x 33(H) x 6(D)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4258	\$22.95	\$20.35

4 CHANNEL POE MIDSPAN INJECTOR FOR ARDUINO

Power up to 4 EtherTens or EtherMegs with DC from a low cost pluggack across your home or office network cables. This takes all the hard work out of cutting and hacking Ethernet cables to power remote boards, it isolates and powers the correct wires automatically.

- 4 channels of input/output jacks
- 4 EtherTen or EtherMega boards can be connected directly and powered by standard network cables on the output side
- Commercial Power-over-Ethernet sources are not required
- Blue power LED
- Mounting holes / Dimensions: 88(W) x 53(H) x 19(D)mm



freetronics

↑	Cat.	Qty 1+
	XC-4254	\$26.95

MODULES & SHIELDS - CHARGERS

USB LI-PO CHARGER FOR ARDUINO

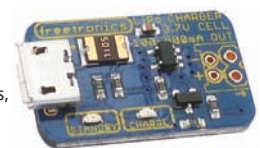
A smart and convenient way to charge 3.7V Lithium Polymer cells from a 5V USB source such a computer or a mobile phone charger. This charger uses an onboard charge management chip that monitors the state of the battery and adjusts the charge current accordingly to ensure the battery is charged safely.

- 5V in from USB connection (micro USB, not included)
- Output to suit 3.7V single Li-Po cell or parallel matched set of cells
- 100mA, 200mA, 300mA, 500mA selectable maximum charge rate
- Status LEDs for charge and standby
- 500mA polyfuse to protect power source
- Pads to fit 2mm JST connector or 0.1" connector

Note: No micro-USB cable or battery connector is included. Different batteries use different connectors, so the module has pads for you to mount the appropriate connector for your particular battery.

Usage

1. Connect your battery to the output of the charger.
2. Connect a micro USB cable to the input of the charger and connect to a computer USB port, or connect a mobile phone charger with a micro USB connector.
3. While charging, the "Charge" LED will illuminate and the charger will supply up to the max current configured by the current limit jumpers. As the battery approaches full charge the charger will decrease the current until full charge is reached.
4. When charging is complete, the green "Standby" LED will illuminate and the charger will stop supplying current to the battery.



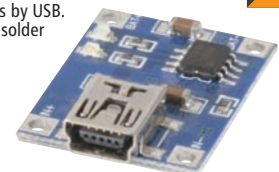
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4243	\$14.95	\$13.35

LITHIUM BATTERY CHARGE PLATE MODULE FOR ARDUINO

This tiny module charges a single lithium cell from a 5V supply. Ideally paired with XC-4512 DC-to-DC Converter Module to create a device that runs on a single lithium cell and recharges by USB. Output via solder tabs, Input is either via solder tabs or a mini-USB port.

- Input voltage 4.5V-5.5VDC
- Linear charge rate of 1%
- Full charge voltage 4.2V
- Charge state LEDs
- Dimensions: 27(L) x 19(W) x 5(H)mm



NEW
2015

duinotech

Note: Batteries not included

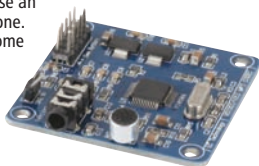
↑	Cat.	Qty 1+	Qty 5+
	XC-4502	\$4.95	\$4.45

MODULES & SHIELDS - AUDIO

MP3 RECORDING MODULE FOR ARDUINO

A full featured MP3 module that supports both playback and recording. An onboard microphone is used for audio in, and a 3.5mm jack provides the output. There is also a line-in header to use an external audio source instead of the microphone. Most projects using this device will require some form of mass-storage, such as an SD card.

- Input power 5VDC
- Supports MP3, MP3 + V, WMA, WAV, MIDI, SP-MIDI
- UART & SPI interface
- Recording format IMA ADPCM
- Dimensions: 44(L) x 44(W) x 10(H)mm



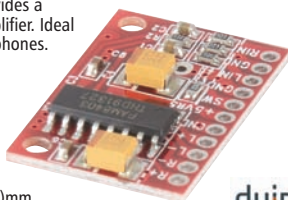
duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4516	\$29.95	\$26.95

ARDUINO COMPATIBLE 2 X 3W AMPLIFIER MODULE

This remarkably small module provides a complete 2 x 3W stereo audio amplifier. Ideal for driving small speakers and earphones. Requires no external components.

- Operating Voltage: 2.5-5.5VDC
- Output Power: 2x3W @ 4ohm
- Efficiency: >90%
- Uses PAM8403 IC.
- Amplifier type: Class-D
- Dimensions: 23(W) x 16(D) x 2(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4448	\$4.95	\$4.45

ARDUINO COMPATIBLE MICROPHONE SOUND SENSOR MODULE

This unit is highly sensitive with the added advantage of having two outputs. An analogue output for real time microphone voltage signal, and a digital output for when the sound intensity reaches its threshold. Great to turn your Arduino® into a voice recorder or vox.

- 5VDC operational voltage
- Sensitivity potentiometer adjustment
- Dimensions: 43(L) x 16(W) x 13(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4438	\$7.95	\$7.15

MICROPHONE SOUND INPUT MODULE FOR ARDUINO

Give your project ears with this sound response and sound pressure level sensing module. An integrated dual signal amplifier converts the sound to separate channels for pulse and frequency measurement, and sound volume level. Designed to connect straight to an Arduino compatible microcontroller, Analog to Digital converter or many other circuits.

- Omnidirectional microphone
- Frequency response 60Hz to 15kHz
- Sensitivity -40dB typical
- Dimensions: 23(W) x 16(H) x 8(D)mm



freetronics

↑	Cat.	Qty 1+
	XC-4236	\$9.95

MODULES & SHIELDS - DISPLAYS

ARDUINO COMPATIBLE 8 X 8 LED DOT MATRIX MODULE

A 64 x red LED matrix, this module is easily controlled with the LedControl library. Display your own custom characters, or chain multiple modules together to make a scrolling display.

- Operating Voltage: 5VDC
- Protocol: SPI(Shift-Register)
- Chipset: MAX7219
- LED Colour: RED
- Dimensions: 62(W) x 32(H) x 14(D)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4499	\$7.95	\$7.15

8 X 8 DOT MATRIX DRIVER MODULE

Use this module to drive an 8x8 dot matrix display. Driven by shift registers it requires only three inputs, plus power. Multiple modules can be directly daisy chained to make a longer display. Perfect for making a sign or scrolling message board. Headers are sized for a standard size 8x8 display, but it can drive any array if connected by jumpers. LED display not included.

- Operating Voltage: 5VDC
- Daisy-chainable.
- Chipset: 74HC595
- Dimensions: 72(L) x 69(W) x 12(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4532	\$19.95	\$17.95

ARDUINO COMPATIBLE I²C RGB DOT MATRIX DRIVER MODULE

A full colour RGB display driver designed to drive a tri-colour 8x8 dot matrix. Driven by an ATmega328p (The same chip as the Arduino), this module communicates with your project via I²C. Alternatively, use an ICSP programmer (XC-4237) to flash your own firmware and the device no longer requires an external controller. Multiple modules can be daisy chained together to make a longer sign or scrolling display.

- Operating Voltage: 5VDC
- Microcontroller: ATmega328
- Display Controller: DM163 + M54564FP
- ICSP header
- Daisy-Chainable
- Dimensions: 66(L) x 60(W) x 12(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4498	\$39.95	\$35.90

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WHAT DOES "EMBEDDED SYSTEM" MEAN?

These days you hardly get through a few pages of microprocessor technology magazines without the term "embedded" or "embedded architecture" being mentioned in relation to some article or other.

There seems to be a universal assumption that everyone knows what is meant by the term "embedded."

Well, for those who were too frightened to ask, here is an explanation: An embedded system is a dedicated circuit, generally centred around a microprocessor (or micro controller) which has a software program in dedicated on-board memory or in the memory of the microprocessor itself that has a SPECIFIC computational purpose. A calculator, is, for example an embedded system. It is specifically made to perform a particular task. A mobile phone is another example of an embedded system. A controller for a washing machine or a microwave oven is an

example of an embedded system also. In other words, the application is specifically embedded in the system architecture. Typically a personal computer has a "general purpose" application.

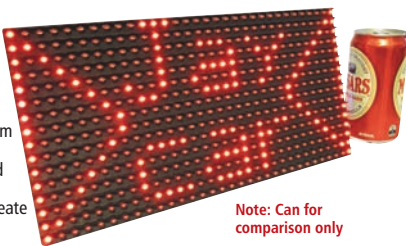
Both personal computers and embedded systems are programmed by high level languages, but nowadays the programming language in a PC is less obvious as the PC generally powers up to an application's menu automatically. The embedded system, on the other hand requires you to program the device directly through a programming language like 'C' etc.

Interestingly, Smartphone which can still be regarded as an embedded system are looking more and more like PCs every day. May be the definitions will need to be redefined in future.

MODULES & SHIELDS - DISPLAYS (CONTINUED)

LARGE DOT MATRIX DISPLAY PANEL FOR ARDUINO

A huge dot matrix LED panel to connect to your Freertronics Eleven, EtherTen and more! This large, bright 512 LED matrix panel has on-board controller circuitry designed to make it easy to use straight from your board. Clocks, status displays, graphics readouts and all kinds of impressive display projects are ready to create with this display's features.



Note: Can for comparison only

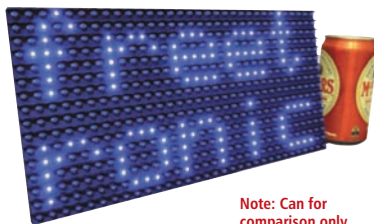
- 32 x 16 high brightness Red LEDs (512 LEDs total) on a 10mm pitch
- 5V operation
- Viewable over 12 metres away
- Tough plastic frame
- Controller IC is on board, simple clocked data interface
- Arduino compatible library, graphics functions and example support
- Dimensions: 320(W) x 160(H) x 14(D)mm (30mm(D) including rear connectors)



↑	Cat.	Qty 1+	Qty 5+
	XC-4250	\$43.95	\$38.45

LARGE DOT MATRIX DISPLAY PANEL FOR ARDUINO

A huge dot matrix LED panel to connect to your Freertronics Eleven, EtherTen and more! This large, bright 512 LED matrix panel has on-board controller circuitry designed to make it easy to use straight from your board. Clocks, status displays, graphics readouts and all kinds of impressive display projects are ready to create with this display's features.



Note: Can for comparison only

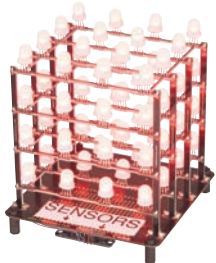
- 32 x 16 high brightness Blue LEDs (512 LEDs total) on a 10mm pitch
- 5V operation
- Viewable over 12 metres away
- Tough plastic frame
- Controller IC's on board, simple clocked data interface
- Arduino compatible library, graphics functions and example support
- Dimensions: 320(W) x 160(H) x 14(D)mm (30mm(D) including rear connectors)



↑	Cat.	Qty 1+	Qty 5+
	XC-4251	\$89.95	\$80.95

RGB LED CUBE KIT 4X4X4 FOR ARDUINO

This stunning 3D-matrix of 64 RGB LEDs incorporates an onboard Arduino-compatible controller so you can produce mesmerising light shows controlled by software. Use it as a mood light, or create your own "ambient device" that gently notifies you of new email or instant messages!



- 4 x 4 x 4 matrix of individually addressable 8mm RGB LEDs
- Arduino driver library with example programs
- Includes ZigBee headers so you can add a wireless module
- Requires assembly
- Dimensions: 106(W) x 130(H) x 106(D)mm (assembled)

↑	Cat.	Qty 1+	Qty 5+
	XC-4274	\$89.95	\$80.95

128X128 PIXEL OLED DISPLAY MODULE FOR ARDUINO

Light up your display needs with this high resolution, full colour OLED display module! Perfect for graphics, gauges, graphs, even make your own video game or interactive display.



- microSD card slot
- 16,384 full colour RGB pixels in a 128 x 128 format
- Active display area 28.8 x 26.8 mm, (1.5 inch diagonal)
- 4 removable mounting tabs
- Simple interface with Arduino compatible library, graphics and text functions plus examples
- Dimensions: 44(W) x 36(H) x 5(D)mm

↑	Cat.	Qty 1+	Qty 5+
	XC-4270	\$54.95	\$49.45

4D SYSTEMS INTELLIGENT 3.2" LCD MODULE WITH TOUCH FOR ARDUINO

Add a new level of usability to your Arduino project, or create a full stand alone project with this touch screen module pack. It includes a 3.2" LCD colour display with resistive touch and multiple input/outputs, a 4D Arduino shield and 5 way interface cable. There is also a USB programming adaptor and some pre-loaded software on a microSD card. This pack allows for quick connection to existing Arduino projects to design and build. Comes with developer software that offers several different ways to program from seasoned 4DGL coders who like to write code notepad style, to people who prefer working in an environment more akin to Visual Basic using the VISI Genie software. The display module itself can be reconfigured beyond the boundaries of the Arduino using the 4D Systems Workshop4 IDE software. A cost effective, modern way to add an interactive touchscreen to a project. See our website, or 4D Systems website (www.4dsystems.com.au) for more details and information.

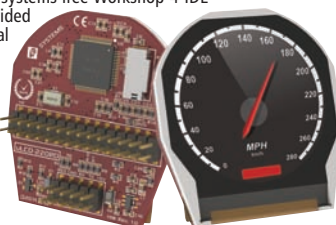


- Operating voltage: 4.5 - 5.5VDC
- Screen resolution: 240 x 320 pixels
- 65K True to life colours
- Supplied with display module, Arduino shield, 5-way jumper cable, 5-way adaptor and quick start guide.
- Screen display area: 64.8 x 48.6mm
- Screen dimensions: 77.7 (H) x 54.3(W) x 17.9(D)mm

↑	Cat.	Qty 1+	Qty 5+
	XC-4280	\$119.00	\$106.95

INTELLIGENT 1.3" ROUND LCD MODULE FOR ARDUINO

This innovative circular display is ideally suited to graphical gauges, needle-meters and robotics projects. This display is easy to program and interface to your project with 4D systems free Workshop-4-IDE software. A 2GB microSD card is provided to store graphical elements. Additional inputs and outputs are available to augment your project.



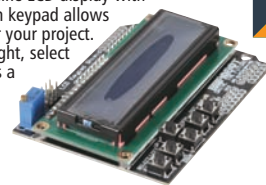
See our website for full feature list.

- Resolution: 220 x 220 (Round)
- Colours: 65K
- 16 GPIO pins
- 4 Analog Inputs
- Up to 6 PWM outputs.
- Up to 3 SPI ports
- Up to 4 Serial TTL ports
- Up to 3 I2C ports
- PWM Audio output, play .WAV files from SD card.
- Dimensions: 43(L) x 47(W) x 14(D)mm

↑	Cat.	Qty 1+	Qty 3+
	XC-4284	\$99.95	\$89.95

ARDUINO COMPATIBLE KEYPAD SHIELD WITH LCD

Comes with a built-in 16 character by 2 line LCD display with adjustable backlight, this six push button keypad allows you to create a user friendly interface for your project. The keypad consists of up, down, left, right, select and also a reset button. Perfect to use as a selection menu.



- 16 Characters x 2 lines (32 Characters)
- Contrast adjust knob
- LED Backlight
- 4 Bit Arduino LCD Library
- Dimensions: 80(W) x 58(D) x 20(H)mm

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4454	\$14.95	\$13.45

MODULES & SHIELDS - LEDS

3W LED MODULE

A high brightness LED in an easy to use modular package. Includes a PWM input for brightness control.



- Operating Voltage: 5VDC
- Power Consumption: 3W
- Light Output: 200 Lumens
- Colour Temperature: 6000K
- Dimensions: 30(L) x 23(W) x 6(H)mm

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4468	\$9.95	\$8.75

MODULES & SHIELDS - LEDS (CONTINUED)

FULL COLOUR RGB LED MODULE FOR ARDUINO

This is an LED with a brain! Includes a bright RGB LED on the top of the board and a WS2801 constant-current, addressable, multi-channel LED driver on the back. This smart module can be daisy-chained, so you can connect a number of these together in a string and drive each of the module colours individually from your microcontroller. The WS2801 includes its own built-in PWM outputs, so once you have set the brightness it will maintain it independently.

- 3.3 to 5V operation
- Constant current controller
- Requires just 2 data connections: clock and data
- Input and output headers on opposite sides of the board for easy daisy-chaining
- Dimensions: 18(W) x 18(H) x 5(D)mm



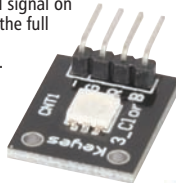
freetronics

↑	Cat.	Qty 1+
	XC-4234	\$9.95

ARDUINO COMPATIBLE RGB LED MODULE

Using a 5050 RGB LED, by adjusting a PWM signal on the three primary colours the user can gain the full colour spectrum. This tiny module can be interfaced with a variety of microcontrollers.

- 3.3V to 5V operation
- 4 pin header
- Common ground led
- Limiting resistor to prevent burn out
- Dimensions: 25(L) x 15(W) x 2(H)mm



NEW 2015

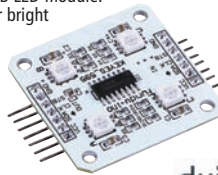
duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4428	\$4.50	\$3.95

ARDUINO COMPATIBLE 4 X RGB LEDS MODULE

Display a full range of colours with this RGB LED module. The 4 x SMD 5050 LEDs onboard are super bright and controlled by the 74HC595 chip.

- 5VDC operation
- Colours: RGB
- Dimensions: 48(L) x 38(W) x 5(H)mm



NEW 2015

duinotech

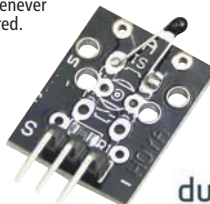
↑	Cat.	Qty 1+	Qty 5+
	XC-4466	\$12.95	\$11.35

MODULES & SHIELDS - TEMPERATURE

DS18B20 DIGITAL TEMPERATURE SENSOR

Versatile digital temperature sensor. Use whenever accurate temperature measurement is required. No calibration necessary.

- Arduino® library available.
- Protocol: Dallas 1-Wire
- Resolution: 9-12 bits, configurable.
- Temperature Range: -55°C - +125 °C
- Accuracy: +/- 0.5 °C
- Dimensions: 20(W) x 15(L) x 5(H)mm



NEW 2015

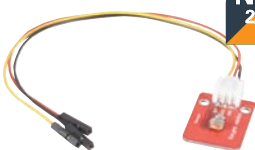
duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4538	\$19.95	\$17.95

ARDUINO COMPATIBLE TEMPERATURE SENSOR MODULE

This module provides a simple way to measure temperature. The module outputs an analog voltage that varies directly with temperature. Connect it straight to one of your duinotech analog inputs.

- Operating voltage: 5VDC
- 210mm breakout cable included
- Dimensions: 33(W) x 22(D) x 9(H)mm



NEW 2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4494	\$4.95	\$4.45

IR TEMPERATURE SENSOR MODULE FOR ARDUINO

Remote temperature sensing for your Arduino! Connect this to your board and point it at a surface or heat source to remotely measure its temperature. This is our special version of the industrial infrared remote thermometer units with an onboard power supply, communication support and a software library and examples supplied.

- 3.3 to 5V operation
- -33 to +220 °C measurement range, 1 second response time
- Free software library and examples
- On-board power supply and communications interface
- Dimensions: 38(W) x 14(H) x 12(D)mm



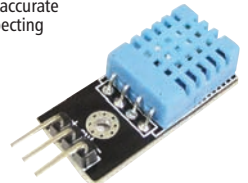
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4260	\$37.95	\$33.95

DHT11 DIGITAL TEMPERATURE & HUMIDITY SENSOR

Measure both temperature and humidity with this nifty module. Full digital operation so no analog to digital calibration is required. Faster than XC-4432, but less accurate and with a smaller temperature range. Use when expecting rapid changes in temperature.

- Arduino™ library available.
- Protocol: 1-Wire (Not Dallas 1-Wire, one data pin is required per sensor used)
- Operating Voltage: 3-5 VDC
- Temperature Range: 0 °C - 50 °C +/- 2 °C
- Humidity Range: 20 - 80% +/- 5%
- Sample Rate: 1Hz
- Dimensions: 52(W) x 20(L) x 13(H)mm



NEW 2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4520	\$9.95	\$8.75

DHT22 DIGITAL TEMPERATURE & HUMIDITY SENSOR

Measure both temperature and humidity with this nifty module. Full digital operation so no analog to digital calibration is required. More accurate than XC-4520, but slower.

- Arduino® library available.
- Protocol: 1-Wire (Not Dallas 1-Wire, one data pin is required per sensor used)
- Temperature Range: -40 °C - 80 °C +/- 0.5 °C
- Humidity Range: 20 - 90% +/- 2%
- Sample Rate: 0.5Hz
- Dimensions: 52(W) x 20(L) x 13(H)mm



NEW 2015

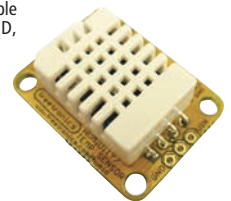
duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4432	\$9.95	\$8.75

HUMIDITY & TEMPERATURE SENSOR MODULE FOR ARDUINO

Measure temperature and relative humidity using a simple interface that requires just three wires to the sensor: GND, power, and data. Supported by an Arduino library that makes it very easy to read values into your project, so with a single I/O line from your microcontroller you can read both temperature and humidity.

- -4°C to +125°C temperature range with +/- 0.5°C accuracy
- 0-100% relative humidity with 2-5% accuracy
- 0.5Hz sample rate (one sample every 2 seconds)
- 3 to 5V operation
- Power consumption just 4.3mA during reads, even less when idle
- Blue power LED
- Dimensions: 31(W) x 23(H) x 4(D)mm



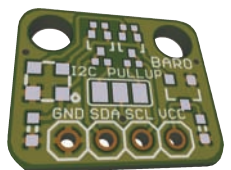
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4246	\$23.95	\$21.35

BAROMETRIC PRESSURE SENSOR MODULE FOR ARDUINO

Highly sensitive barometric pressure sensor for weather, industrial, rocketry, balloon, and many pressure applications. Designed specifically for use as a microaltimeter so it has incredible resolution: so sensitive it can detect an altitude change of just 130mm!

- Operating pressure range 10 to 2000mBar
- I²C interface for easy Arduino connection
- 3.3V / 5V operation
- Dimensions: 15(W) x 13(H) x 5(D)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4255	\$33.95	\$29.45

MODULES & SHIELDS - TEMPERATURE (CONTINUED)

ARDUINO COMPATIBLE ULTRAVIOLET SENSOR MODULE

This module will measure the UV light and adjust the output voltage depending on the UV intensity. Capable of measuring over a wide spectral range of 200nm-370nm, this module is a valuable addition for weather station projects or in any place which require stable and accurate measurement of UV light.

- Working Voltage 3-5V DC
- Output voltage 0-1200mV
- Current 0.06-0.1mA
- Response wavelength 200-370nm
- Working temperature: -20 to 85°C
- Dimensions: 43(L) x 13(W) x 8(H)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4518	\$29.95	\$26.95

MODULES & SHIELDS - MAGNETIC

ARDUINO COMPATIBLE HALL EFFECT SENSOR MODULE

Sense magnetic presence, rotating wheels and magnets, door sensors and any other magnets near this device.

- Output turns on at 30Gauss(3mT) and off at 10Gauss(1mT)
- Operating Voltage: 4.5 - 28VDC
- Schmitt-Trigger output.
- Dimensions: 20(W) x 15(L) x 3(H)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4434	\$4.95	\$4.45

MAGNETIC REED SWITCH MODULE

A simple to use reed switch module, output will turn whenever the reed switch is in proximity to a magnetic field. Useful for door security.

- Operating voltage 3-5VDC
- Analog and digital output
- 16mA comparator output capacity
- Dimensions: 37(L) x 15(W) x 23(H)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4476	\$7.95	\$7.15

3 AXIS DIGITAL COMPASS MODULE

This module allows you to take accurate compass bearings, no matter how it is orientated. Easily interfaced via I²C.

- Operating Voltage: 5VDC
- Resolution: 12bits
- Interface: I²C
- Includes 5V - 3V level shifter.
- Dimensions: 20(L) x 16(H) x 5(H)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4496	\$9.95	\$8.75

MODULES & SHIELDS - GENERAL

ARDUINO COMPATIBLE PHOTSENSITIVE LDR MODULE

Measure light levels with this sensor module. This module uses a light dependant resistor to produce an output voltage that varies with light level. Connect it straight into your duinotech or other Arduino compatible board to build a night/day sensor, a sun tracker or combine it with our laser module XC-4490 to make a laser trip wire.

- Operating voltage: 3-5VDC
- Includes breakout cable
- Dimensions: 29(W) x 22(D) x 10(H)mm



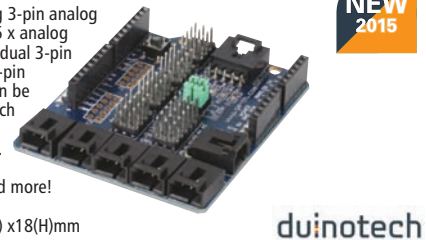
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4446	\$4.95	\$4.45

ARDUINO COMPATIBLE SENSOR EXPANSION SHIELD

This shield makes connecting 3-pin analog sensors a snap. Each of the 5 x analog inputs is broken out to individual 3-pin connectors. There is also a 4-pin communications port that can be set for either UART or I²C. Each of the digital pins is also given a 3-pin vertical header. Plug and Play connection for servos, sensors, switches and more!

- Dimensions: 68(W) x 57(D) x 18(H)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4452	\$9.95	\$8.75

ARDUINO COMPATIBLE DUAL ULTRASONIC SENSOR MODULE

The popular HC-SR04 ultrasonic distance module provides an easy way for your duinotech to measure distances up to 4.5m. Use it to add obstacle avoidance to your next robotics project or mount it on a servo to create your own ultrasonic SONAR!

- Uses just two digital pins
- Operating Voltage: 5V
- Sensor Angle: <15°
- Detection Distance: 20mm - 4.5m
- Dimensions: 45(W) x 20(D) x 13(H)mm



NEW
2015

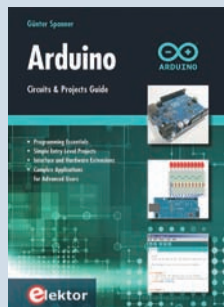
↑	Cat.	Qty 1+	Qty 5+
	XC-4442	\$7.95	\$7.15

LET'S FIND EVERYTHING YOU NEED!

ARDUINO CIRCUIT & PROJECTS GUIDE

This book is aimed at those who have already had some basic experience in electronics. Typical high school level circuits, Ohm's law, etc., are sufficient. The function and behaviour of the major electronic components are well covered in this book. During the basic chapters, more elaborate projects are discussed, so that even students and teachers who have some pre-existing technical knowledge will encounter new challenges. The skill and experience level required for these projects ranges from absolute beginner, to hobbyist-expert. Beginners will benefit from progressing through the book as they build their skills, while experienced readers will find it a useful handbook.

- Programming essentials
- Simple entry level projects
- Interface and hardware extensions
- Complex applications for advanced users
- Soft cover, 260 pages. 235 x 170 x 15mm



NEW
2015

↑	Cat.	Qty 1+
	BM-7142	\$64.95

PROGRAMMING ANDROID APPS

When it comes to personalising your Smartphone don't feel limited to off the shelf applications. Creating your own apps and programming Android® devices far is easier than you might think. This book is an invaluable introduction to programming apps for Android® devices. The book explains the operation of the Android® OS in a clear step-by-step method.

The book offers a wide range of applications based on hands-on examples, covering everything from simple math programs, reading sensors and GPS data, right up to programming for advanced Internet applications. Besides writing applications in the Java programming language, this book also explains how apps can be programmed using Javascript and PHP.

- Soft cover, 244 pages. 234 x 169 x 14mm



NEW
2015

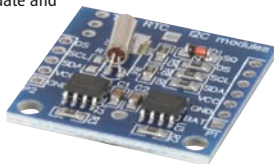
↑	Cat.	Qty 1+
	BT-1382	\$54.95

MODULES & SHIELDS - GENERAL (CONTINUED)

ARDUINO COMPATIBLE REAL TIME CLOCK (RTC) MODULE

This tiny little module will keep accurate time using the supplied rechargeable LIR2032 button battery. Great to use with all of your Arduino® projects that require the use of the date and time such as clocks, data-loggers and timers.

- Using a 24C32 32k EEPROM
- Supplied with a 3.6V rechargeable battery and charging circuit
- Read and write functionality
- Usage time approx. 1 year fully charged
- Dimensions: 28(L) x 28(W) x 7(H)mm



NEW
2015

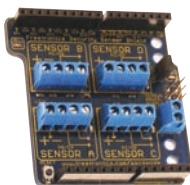
duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4450	\$4.95	\$4.45

SECURITY SENSOR SHIELD FOR ARDUINO

This shield allows up to 4 security sensors to be connected to an Arduino with full End-Of-Line (EOL) support to detect tampering with the sensors or cable. EOL technology allows the system to detect a variety of events using a single cable pair to the sensor, including: sensor triggered; sensor cable cut; sensor cable short-circuited; sensor housing opened.

- 4 sensor channels
- Supports PIR motion sensors, microwave sensors, glass break detectors, etc
- Status LEDs on each channel
- Dimensions: 60(W) x 54(D) x 17(H)mm



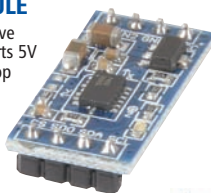
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4217	\$29.95	\$26.90

ARDUINO COMPATIBLE DIGITAL TILT ANGLE SENSOR ACCELERATION MODULE

Low power consumption, compact capacitive micromachined acceleration sensor. Supports 5V input, onboard RT9161, lower pressure drop than the 1117; faster load the appropriate speed, ideal for noisy power environment.

- Gold plated stackable headers
- 5VDC rails
- Dimensions: 73(L) x 29(W) x 23(H)mm



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4484	\$9.95	\$8.75

ARDUINO COMPATIBLE LOGIC LEVEL CONVERTER MODULE

While most of the modules used in the Arduino® world are 5V logic, some are 3.3V. And unfortunately, connecting them directly often results in "letting out the smoke!" This little module is the answer. Provides two bi-directional channels to safely marry 3.3V with 5.0V. Drops straight into solderless breadboard or can be soldered into your own PCBs.

- Two bi-directional channels.
- 12-pin DIL package
- Dimensions: 35(W) x 31(D) x 21(H)mm



NEW
2015

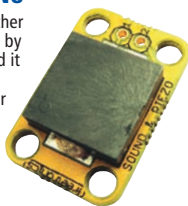
duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4486	\$4.95	\$4.45

SOUND & BUZZER MODULE FOR ARDUINO

This versatile piezo-element module can be used for either input or output! It can be used as a noise-maker driven by your microcontroller for audible feedback of events, and it can also be used as a knock-detector input to sense events and react to them. Includes a built-in 1M resistor to allow the piezo element to detect shocks.

- Frequency response 0-20kHz, peak resonant frequency: 4kHz +/-500Hz
- Sound pressure level at 10cm: 75dB (min)
- 1 to 25V rated voltage (3 to 5V typical)
- Built-in 1M resistor for knock sensor functionality
- Dimensions: 23(W) x 16(H) x 5(D)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4232	\$12.95	\$11.35

ACTIVE BUZZER MODULE

Use this module to generate sound from your Arduino; libraries are available to produce different tones and frequencies.

- Operating voltage 5VDC
- Active speaker
- 3 pin header
- Dimensions: 25(L) x 15(W) 10(H)mm



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4424	\$3.95	\$3.45

ARDUINO/DUINOTECH PROTOTYPING SHIELD

Drop this shield onto your Arduino and you have the perfect space for prototyping small circuits. Solder-pads are provided for all of the Arduino pins. A small breadboard is included and can be stuck to the top of the shield with the included tape. Headers are also included to connect common 1602-type text LCDs or a Nokia®5110-type graphical LCD.

- Fully compatible with Arduino, duinotech LEONARDO, duinotech Classic and duinotech MEGA
- Solder less breadboard included
- LEDs for power and D13 status
- Dimensions: 68(L) x 53(W) x 12(H)mm



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4480	\$7.95	\$7.15

ARDUINO COMPATIBLE FAN WITH PROPELLER MODULE

Driven by a L9110H full H bridge driver, this module allows you to develop your own speed control project. A high efficiency propeller can easily blow a light flame at a distance of 200mm.

- Propeller size: 75mm diameter
- 5VDC working voltage
- 4 pin header interface
- Dimensions: 29(L) x 22(W) x 10(H)mm



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 10+
	XC-4534	\$19.95	\$17.95

ARDUINO COMPATIBLE RED LASER DIODE MODULE

Need a red laser light for your latest project? Here it is! Everything you need to drive the laser diode is included on the board. Just connect it to 5VDC and you're good to go! Use it with our light sensor module XC-4446 to make a laser tripwire.

- Operating Voltage: 5VDC
- Output power: <1mW
- Wavelength: 650nm(Red)
- Dimensions: 45(W) x 23(D) x 10(H)mm



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4490	\$4.95	\$4.45

ARDUINO COMPATIBLE ALCOHOL SENSOR MODULE

Using a MQ series gas sensor, this module easily adds alcohol detection to your project. An analog output can be used to monitor changes in alcohol concentration, while a digital output is triggered when the concentration exceeds a pre set threshold. Build your own breathalyser or automate your home-brewing.

- Twin Analog and Digital Outputs.
- Adjustable sensitivity
- Operating voltage: 5VDC
- Dimensions: 50(L) x 20(W) x 13(H)mm



NEW
2015

duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4540	\$9.95	\$8.75

MODULES & SHIELDS - GENERAL (CONTINUED)

LOGIC LEVEL CONVERTER MODULE FOR ARDUINO

Many of the most interesting sensors and devices are only available in 3.3V or even lower voltage versions, which can be a problem if you want to connect them to a 5V microcontroller such as an Arduino. This module easily connects different logic voltage levels together for bi-directional communication on up to 4 channels, allowing you to use low-voltage sensors with a 5V microcontroller.

- 4 bi-directional channels
- Easily connect 3.3V sensors and devices to 5V microcontrollers
- Pass-through GND connection
- Dimensions: 18(W) x 16(H) x 4(D)mm



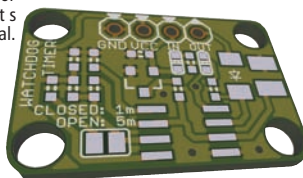
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4238	\$8.95	\$7.95

WATCHDOG TIMER MODULE FOR MICROCONTROLLERS

This handy module connects to your Arduino or other microcontroller project and makes sure it's still running by watching for a heartbeat signal. If the signal stops, the watchdog uses the microcontroller reset line to kick it back into life. Ideal for projects that are mounted in hard-to-reach places and need to keep running with long term reliability. Selectable 5 minute or 1 minute timeout interval.

- Watches for microcontroller activity
- Resets your project if it dies
- 5 minute or 1 minute timeout interval
- Status LEDs on input and output for visual feedback
- Dimensions: 22(W) x 15(H) x 4(D)mm



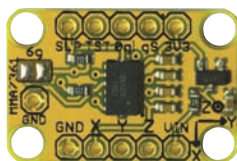
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4267	\$17.95	\$15.95

3-AXIS ACCELEROMETER MODULE FOR ARDUINO

This 3-axis accelerometer module can operate in either +/-1.5g or +/-6g ranges, giving your project the ability to tell which way is up. Ideal for robotics projects, tilt sensors, vehicle data loggers, and whatever else you can dream up. Perfectly suited for Arduino projects.

- Independent X, Y, and Z axis outputs
- Can run from either 5V or 3.3V
- Zero-G free-fall detection
- Dimensions: 23(W) x 15(H) x 4(D)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4226	\$22.95	\$20.35

TECH TALK!

Jaycar/Elektor Subscription Offer - 2015

Access over 11,000 articles and projects on the Elektor-Labs.com website when you take a 12-month subscription to Elektor. Find out how you can save 66% over the regular subscription price on page 63.



ARDUINO COMPATIBLE 3 AXIS ACCELEROMETER MODULE

NEW
2015

This 3 axis accelerometer is low in power consumption and handy for any motion sensitive projects. This module provides voltage output of signal disposal, and measures +/-3g magnetic field full scale acceleration minimum. Endless possibilities of applications for robotics, as tilt sensor, vehicle data logger or even in drones.

- Independent X,Y and Z axis outputs
- Operating voltage 3.3V to 5VDC
- ADXL335 chip
- 13 bit measurement up to +16
- Dimensions: 21(L) x 15(W) x 11(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4478	\$7.95	\$7.15

SHIFT REGISTER EXPANSION MODULE FOR ARDUINO

Run out of digital outputs on your microcontroller? No problem! Simply use this shift register expansion module to drive up to 8 devices using just 3 pins on your microcontroller. They can also be daisy-chained together so that you can drive 16 channels or even more without sacrificing precious output pins. Handy for all sorts of projects including driving LED 7-segment displays, dot matrix displays, multi channel relays and more.

- 8 output channels per module
- Daisy-chain multiple modules together
- 2 to 6V operation
- Blue power LED
- Dimensions: 23(W) x 16(H) x 4(D)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4240	\$8.95	\$7.95

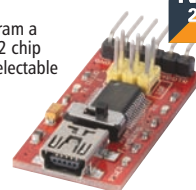
MODULES & SHIELDS - PROGRAMMERS

ARDUINO COMPATIBLE FTDI USB TO SERIAL MODULE

NEW
2015

A mini-USB to 6-pin serial port module used to program a variety of Arduino® boards. It uses the original FT232 chip with power/sending/receiving indicator and also a selectable 3.3V and 5V power option to suit different boards.

- 3.3V & 5VDC power switch
- Send & receive indicators
- Supplied with USB cable
- Dimensions: 43(L) x 17(W) x 12(H)mm



↑	Cat.	Qty 1+	Qty 5+
	XC-4464	\$17.95	\$16.10

ICSP PROGRAMMER FOR ARDUINO

Program new applications into a wide range of microcontrollers using this ICSP programmer with a USB interface. Compatible with Arduino boards, ZZ-8726 ATmega328P MCU and fully supported by the Arduino IDE, allowing you to install or update Arduino-compatible boards and your own custom-made projects.

- Compatible with a wide range of microcontrollers, including all Arduino boards
- Compatible with the Arduino IDE on Windows, Mac®, and Linux
- Supplied with a USB cable and ISP programming cable
- Dimensions: 56(L) x 46(W) x 22(H)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4237	\$27.95	\$24.95

LET'S FIND EVERYTHING YOU NEED!

MASTERING MICROCONTROLLERS HELPED BY ARDUINO

The aim of this book is not only to let you enter the World of Arduino, but also to help you emerge victorious and continue your microcontroller programming learning experience by yourself. In this book theory is put into practice on an Arduino board using the Arduino programming environment. Having completed this fun and playful course, you will be able to program any microcontroller, tackling and mastering I/O, memory, interrupts, communication (serial, I²C, SPI, 1-wire, SMBus), A/D converter, and more. All programs presented can be downloaded for free from www.elektor.com/mastering-microcontrollers. For this second edition, the author has designed a versatile printed circuit board that can be stacked on an Arduino board. The assembly can be used not only to try out many of the projects presented in this book but also allows for new exercises that in turn provide the opportunity to discover new techniques.

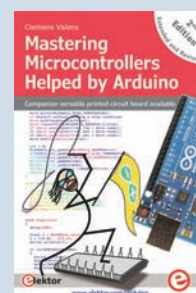
This book is for you if you are:

- A microcontroller novice
- An Arduino user (enthusiast, artist, etc.) wishing to deepen your knowledge
- An electronics graduate or undergraduate student
- A teacher looking for inspiration

- Soft cover, 380 pages. 209(L) x 139(W)mm

BOOK

NEW
2015



↑	Cat.	Qty 1+
	BM-7144	\$69.95

MODULES & SHIELDS - USB

USB-BOOST

Takes a power input of 1.2 to 4.5V, and boosts it to a regulated 5V output. Perfect for powering Arduino projects from batteries, such as a single 3.7V Li-Po cell. Can even be used to charge USB devices such as mobile phones from a low-voltage source. Includes status outputs so your microcontroller can actively monitor the status of the power supply.

- USB output jack
- 1.2 to 4.5V input range
- 5V output
- 500mA maximum output
- Low-input automatic cut-off to protect battery
- Configurable low-input level of 1.17V, 2.33V, or 3.75V
- Low-battery warning LED
- Logic outputs for low-battery and power output OK
- Dimensions: 46(W) x 21(H) x 10(D)mm



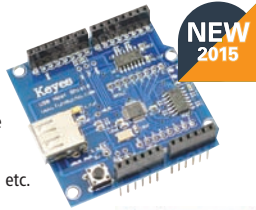
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4239	\$14.95	\$13.35

ARDUINO COMPATIBLE USB HOST EXPANSION BOARD

Brings the ubiquitous USB Host connectivity to your Arduino® project. This shield even supports Google Android® ADK allowing connections to Smartphones and Tablets. The USB port can also be used as a USB hub.

- Supports HID devices: keyboards, mice, joysticks, etc.
- Supports mass storage devices: USB sticks, memory card readers, external hard drives, etc.
- Dimensions: 55(W) x 54(D) x 23(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4456	\$39.95	\$35.90

MODULES & SHIELDS - DATALOGGING

ARDUINO COMPATIBLE DATA LOGGING SHIELD

Extremely easy to set up. Use this datalogging shield to store your data to files on any FAT16 or FAT32 formatted SD card, or have it to be read by any plotting, spreadsheet or analysis program. All data stored is timestamped in real-time so you know precisely what happened when! Uses a 3.3V converter to avoid damaging your SD card. Includes a 3V button battery.

- Stackable headers
- Reset button
- Changeable CR1220 battery
- 102 solder pads
- Dimensions: 43(L) x 17(W) x 9(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4536	\$19.95	\$17.95

MODULES & SHIELDS - CAR TRACER

ARDUINO COMPATIBLE LINE TRACE SENSOR MODULE

This module measures the reflectivity of a surface with an infrared emitter/detector pair. The output goes to high whenever the reflectivity exceeds the threshold value, which can be adjusted with the onboard potentiometer.

- Output electrical level signal: Low level when detecting objects/ high level when no objects/0 or 1 decides if objects exist
- VCC/OUT/GND pin connector
- Power Supply: 2.5-12V
- Working current: 18-20mA at 5V

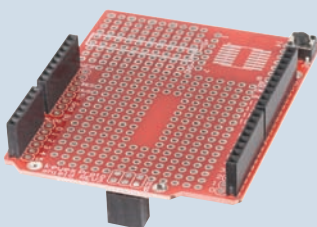


duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4474	\$7.95	\$7.15

SHIELDS DEFINED

Shields are expansion boards that plug in on top of your Arduino-compatible board to extend its capabilities. Options include displays and keypads, radio link receivers, communications, motor and relay drivers, and much more.

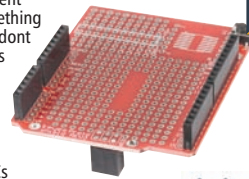


MODULES & SHIELDS - PROTOTYPING

ARDUINO COMPATIBLE PROTOTYPING SHIELD

This stackable shield makes semi-permanent prototyping simple. When you want something more permanent than a breadboard, but don't want to make your own PCB, this shield is the answer. Provides solder-pad access to all of the Arduino's pins, and a large area of isolated pads.

- Includes reset button.
- SOIC-14 breakout, for surface mount ICs
- Dimensions: 68(L) x 53(W) x 10(H)mm



duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4482	\$12.95	\$11.35

RS-232 SHIELD FOR ARDUINO

This shield allows you to connect a legacy device (or computer) to your existing Arduino board. Providing a full RS-232 port, this shield allows you to directly communicate with a huge variety of serial peripherals. You can use the default hardware Serial on pins 0 & 1, or use the software-Serial library on pins 2-7.

- MAX232 Chipset
- DB9 Female Socket
- RS-232 Voltage compliant
- Dimensions: 65(L) x 54(W) x 16(H)mm



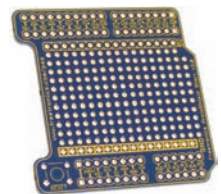
duinotech

↑	Cat.	Qty 1+	Qty 5+
	XC-4227	\$29.95	\$26.95

PROTOSHIELD SHORT FOR ARDUINO

A dedicated short version prototyping shield for the Freetronics EtherTen and EtherMega. This special prototyping shield is designed to fit neatly behind the RJ45 Ethernet jack, allowing you to stack your Ethernet-based projects right on top with standard headers.

- Pads available to fit a reset button
- Gold-plated surface for maximum durability
- Large free-form pad area for your own parts
- Dimensions: 49(L) x 54(W) x 2(D)mm



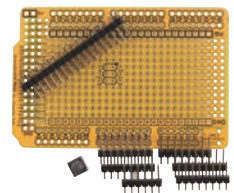
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4248	\$5.50	\$4.90

MEGA PROTOTYPING SHIELD FOR ARDUINO

A super-size prototyping shield to fit the EtherMega (XC-4256) and Arduino compatible "Mega" size boards so you can fit your own parts for projects. Fits on the top of the EtherMega and provides a large matrix of plated-through holes for your own use. Includes header pin sets.

- Over 300 general-purpose plated holes for your parts
- Handy 5V and GND rails
- All Arduino I/O header pins branched out for your use
- Gold-plated surface
- Reset button
- Dimensions: 82(W) x 54(H) x 2(D)mm

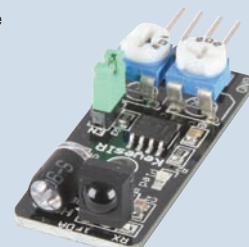


freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4257	\$19.95	\$17.70

MODULES DEFINED

The many modules available in our range give you easy connections with online guides for interactive sensors, actuators, displays, light and sound.

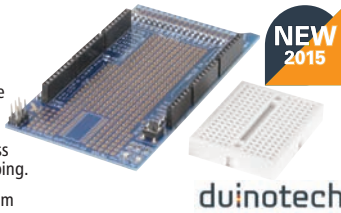


MODULES & SHIELDS - PROTOTYPING (CONTINUED)

PROTOTYPING SHIELD FOR DUINOTECH - MEGA

This shield gives you plenty of room to prototype your latest MEGA project. The stackable shield provides access to all of the MEGA's pins and plenty of solder pads to prototype on. A small solder-less breadboard is included for fast prototyping.

- Dimensions: 106(W) x 56(L) x 19(H)mm



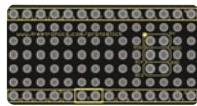
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	XC-4416	\$12.95	\$11.35

LEOSTICK PROTOTYPING SHIELD

Add your own custom parts to the LeoStick to build projects or add more I/O connectors. Fits on the top of the LeoStick and provides you a free matrix of plated-through holes for your own use.

- 64 general-purpose plated holes for your parts
- All Arduino I/O headers brought up for your use
- Includes male header pins
- Gold-plated surface
- Dimensions: 36(L) x 19(W) x 2(D)mm



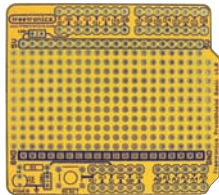
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4268	\$9.95	\$8.75

PROTOSHIELD BASIC FOR ARDUINO

Breadboards are handy for quickly prototyping Arduino projects on the workbench but they are no good for making a more permanent project. The ProtoShield Basic is a low-cost Arduino prototyping shield that enables you to make more durable or permanent projects. It fits directly onto an Arduino compatible board such as the Freetronics Eleven and has a large general-purpose area in the middle where you can solder on your own parts. They're designed to be so cheap that you can keep a few around your workshop just in case you get the urge to build something. The PCB surface is gold-plated for maximum durability and it has connection markings on both the top and the bottom for easy identification.

- Gold plated, top & bottom overlay
- Mounting pads for reset button wired through to Arduino reset line
- Mounting pads for power on LED and current-limiting resistor
- Mounting pads for power supply capacitors
- Clearly marked GND and 5V rails beside prototyping area
- Dimensions: 59(L) x 53(W)mm



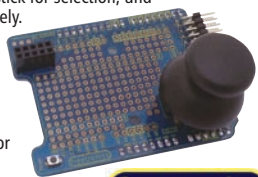
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4214	\$4.95	\$4.45

OLED SHIELD FOR ARDUINO

Connect the 128x128 pixel OLED module (XC-4270) to your Arduino using this handy shield, which also provides joystick input and a Piezo module for sound output. Display menus on the screen, use the joystick for selection, and give audible feedback. OLED module sold separately.

- Easily mount the 128x128 pixel OLED module on an Arduino
- Analogue joystick with push-to-click, great for games or on-screen menus
- Piezo module for sound feedback
- Mount the OLED module directly on the shield or independently using the supplied cable
- Large prototyping area to add your own parts
- Dimensions: 75(W) x 54(H) x 46(D)mm



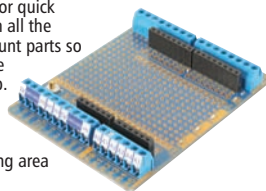
freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4269	\$33.95	\$29.45

TERMINAL SHIELD FOR ARDUINO

Breaks out all the Arduino headers to handy screw terminals, making it easy to connect external wires without using a soldering iron. Ideal for quick experiments or for robust connections! Supplied with all the supporting components already fitted as surface-mount parts so you can start using it right away, as well as stackable headers to allow you to mount another shield on top.

- Gold-plated surface for easy soldering
- Large prototyping area with through-plated holes
- Clearly marked GND and 5V rails beside prototyping area
- Blue surface-mount "power on" LED
- Power supply smoothing capacitors
- Reset button wired through to the Arduino so you can reset it even with the shield mounted over the top.
- 3 general-purpose surface-mount LEDs (red, green, blue) with current limiting resistors pre-fitted
- Dimensions: 79(L) x 61(W) x 26(D)mm



freetronics

↑	Cat.	Qty 1+	Qty 5+
	XC-4224	\$18.95	\$16.95

PROTOTYPING ACCESSORIES

ARDUINO® COMPATIBLE BREADBOARD WITH 830 TIE POINTS

With labelled rows and columns and adhesive back for mounting, it is ideal for electronic prototyping and Arduino® projects.

- Tie points: 830
- Distribution holes: 200
- Terminal holes: 630
- Nubbins and slots on the sides to connect multiple breadboards together
- Dimensions: 165(L) x 54(W) x 9(H)mm
- Weight: 74g



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	PB-8815	\$14.95	\$13.45

ARDUINO® COMPATIBLE MINI BREADBOARD WITH 170 TIE POINTS

With self-adhesive tape on the back, it is ideal for DIY projects including Arduino®. It has 17 holes x 10. Total 170 holes. It can also be permanently mounted with screws (not included).

- Nubbins and slots on the sides to connect multiple breadboards together
- Dimensions: 46(L) x 35(W) x 9(H)mm
- Weight: 14g



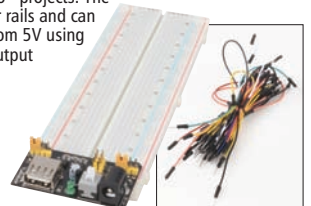
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	PB-8817	\$4.95	\$4.45

SOLDERLESS BREADBOARD WITH POWER SUPPLY & JUMPER LEAD KIT

This kit comprises of a solderless breadboard with 830 connection tie-points, a power supply module and 64 pieces of mixed jumper leads. Ideal for circuit board prototyping and Arduino® projects. The power module can be plugged into the power rails and can be powered from either a 12V plug pack or from 5V using the micro USB socket, and has a switchable output between 3V and 5VDC.

- 1 x Solderless Breadboard with 830 Points
- 1 x Power Supply Module
- 64 mixed jumper wires of different lengths and colours



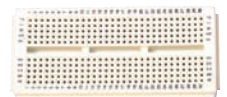
NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	PB-8819	\$19.95	\$17.95

MINI BREADBOARD

One terminal strip supplied which gives 30 holes x 10. Total 300 holes.

- Dimensions: 39(W) x 87(L)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PB-8832	\$12.95	\$11.35	\$10.35

BREADBOARD

- 1680 tie points.
- 400 distribution holes.
- 1280 terminal holes.
- Mounted on a metal plate.
- 3 banana terminals.
- Rubber feet.
- Dimensions: 157(W) x 237(H)mm.
- Board size: 130(W) x 175(H)mm.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PB-8816	\$43.95	\$38.45	\$34.95

BREADBOARD JUMPER KIT

This kit consists of 70 pcs of single core sturdy wire which has been stripped on each end and bent at right angles.

- Specifically made for breadboards
- There are 5 pcs each of 14 different lengths.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PB-8850	\$13.50	\$11.35	\$10.35

PROTOTYPING ACCESSORIES (CONTINUED)

150MM JUMPER LEADS - 40 PIECES

A pack of 40 jumper leads of various colours for prototyping. Ideal for Arduino® and DIY projects. Each flexible lead is 150mm long with pins to suit breadboards or PCB headers.



NEW
2015

↑	Cat.	Qty 1+	Qty 5+
Plug to Plug	WC-6024	\$3.95	\$3.45
Socket to Socket	WC-6026	\$3.95	\$3.45
Plug to Socket	WC-6028	\$3.95	\$3.45

JUMPER LEAD ASSORTMENT KIT - 90 PIECES

Jumper lead set for use in Arduino® projects, school experiments and other hobbyist activities. A kit of 90 pieces measuring between 280mm to 120mm in length and 2mm in width.

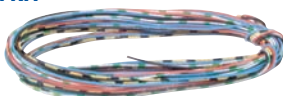


NEW
2015

↑	Cat.	Qty 1+	Qty 5+
	WC-6029	\$9.95	\$8.75

ECONOMY BREADBOARD JUMPER KIT

Solid core hookup cable, which is the ideal size for breadboards. Cut it to whatever lengths you require and strip the ends.

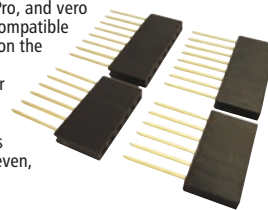


2 metres each of 5 colours
Colours may vary from time to time.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Per Pack	WH-3032	\$4.50	\$3.95	\$3.60

STACKABLE HEADER SET FOR ARDUINO

The perfect accessory to the ProtoShield Basic, Pro, and vero type boards when connecting to your Arduino compatible project. Stackable headers have female sockets on the top and male pins underneath, allowing you to conveniently stack boards and shields up in your project.



- Gold flash 0.1" pitch quality stackable headers
- 2 x 8 pin and 2 x 6 pin included to suit the Eleven, EtherTen, USBDroid and ProtoShields

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HM-3207	\$3.50	\$3.15	\$2.75

POLYMORPH PELLETS

Polymorph will change the way you make parts. It's a commercial grade thermoplastic that softens enough to be formed into any shape at around 62 - 65° C. You simply heat the pellets in hot water. It hardens at room temperature to form a tough plastic material similar in consistency and colour to Nylon. It can be drilled, sanded, ground, machined, painted or heated and reformed again and again.



Endless uses in model making, craft, single part manufacture, prototyping, engineering, science, lab and more.

- Supplied in a 100g bag of 3mm pellets.

This car was moulded in minutes
using a car baking tin!



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NP-4260	\$11.50	\$10.35	\$8.95

ULTIMATE BREADBOARD

Ever since hobby electronics experimentation began, enthusiasts have been looking for better ways to "lash up" a prototype circuit. Indeed, the term 'breadboard' was literally that. You simply borrowed your mum's bread cutting board and drove some nails into the wooden surface and connected wires to the nails to form your circuit. It worked, but it was cumbersome. Better 'Breadboards' came along, including the system we use in "Short Circuits" - see page 43 in this catalogue and of course the plug-in breadboarding system on page 25. There are also experimenters' boards as well.

BASIC EXPLANATION OF "ULTIMATE BREADBOARD"

The system starts with a piece of Printed Circuit Board base. It can be fibreglass or Phenolic. It could even be non-PCB a piece of scrap 'Laminex' or stiff plastic card will suffice. We use PCB material because the copper on one side (or both sides) can come in handy.

Here's the clever bit. We have produced a range of small blank PCB pieces to become anchor points for your breadboard. The anchor points can be round 3 or 5mm discs or more complex 'islands' to mount electronic components to. You attach the discs to the PCB baseboard (your equivalent breadboard) with a tiny drop of superglue. These are located where you need a connect components together to form a circuit (See Fig. 1). The top of the disc still has some copper on it. You then solder to that little island. The beauty of this is that you can translate a schematic circuit diagram almost EXACTLY onto the breadboard! Other systems have fixed grids and you have to interpret the schematic to the rigid pattern of their grid.

PACKET OF 3 & 5MM ANCHOR POINTS

These are the basic parts of the system. 3mm for small anchor terminations. 5mm for multiple terminations/anchor points. With skill you will not need larger anchoring islands, but if you do, simply glue 2 alongside each other and bridge across.

Fig 1.



NEW
2015

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Pack of 20 x 3mm & 10 x 5mm	HP-9564	\$2.95	\$2.60	\$2.40
Pack of 40 x 3mm & 20 x 5mm	HP-9565	\$4.95	\$4.45	\$4.00

Circuit prototyping takes a whole leap forward with our new "Ultimate Breadboard"® system! It is without a doubt the most flexible simple way of making up prototypes with absolutely minimum resources. The system is based on ubiquitous and cheap blank PCB material. It is so simple strictly speaking you don't even need us to supply you anything. You can, in fact, make the components yourself.



Good for RF. The problem for plug-in terminal strip breadboard is stray capacitance. This limits the bandwidth of circuits to fairly low frequencies. The Ultimate Breadboarding system is good to at least 500MHz with careful attention to short component leads. The copper-clad PCB base is a built-in ground plane as well, not to mention an earth.

We believe that this is a revolutionary prototyping system and was developed by one of our rocket scientists, Gil McPherson. We claim copyright on all aspects of this. Separate components (available individually).

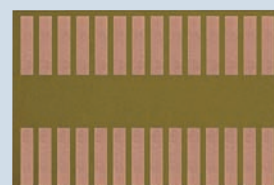
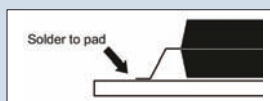
**SEE PAGE 30 FOR A SUITABLE TUBE OF SUPER GLUE
AND THE NEXT PAGE FOR A SUITABLE BLANK PCB SUBSTRATE**

DIL MOUNTING KITS

These are PCB strips that enable you to mount Dual-in-line ICs to your breadboard. They are available in 0.3" pitch and can be trimmed to suit individual IC configurations*. They come as a kit but not include IC sockets. The sockets can be purchased separately. If you are using surface mount ICs you can discard the IC socket and solder directly to the pad. Kit consists of two x 0.3" boards up to 28 pin long.

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2015

*To mount DIL IC the pins must be bent at right angles and soldered to pad like this:



↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-9566	\$5.95	\$5.50	\$4.75

PCB EXPERIMENTING & PROTOTYPING

PC BOARDS - VERO TYPE STRIP

Alphanumeric grid, pre-drilled 0.9mm, 2.5mm spacing.

- Dimensions: 95mm wide x 3 handy lengths

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
75mm	HP-9540	\$4.50	\$3.95	\$3.60
152mm	HP-9542	\$7.95	\$6.95	\$6.25
305mm	HP-9544	\$11.50	\$10.35	\$8.95



SEE OPPOSITE PAGE FOR DETAILS OF OUR BRAND NEW BREADBOARDING/PROTOTYPING SYSTEM YOU WILL BE PLEASANTLY SURPRISED!

UNIVERSAL PRE-PUNCHED EXPERIMENTER'S BOARDS

The low cost way to build prototype or one-off projects. We now stock 3 sizes of phenolic board that has a matrix of punched holes on 0.1" (2.5mm) pitch with 'donut' of tin plated copper around each hole. Finally the non-solder side of the board has an alphanumeric grid printed on it to assist in the component identification board layout.

SMALL - HP-9550

95 x 72mm, 25 x 30 holes (750) 3.6mm edge pitch.

MEDIUM - HP-9552

140 x 95mm, 29 x 50 holes (1450) 2.5mm edge pitch.

LARGE - HP-9554

210 x 78mm, 24 x 67 holes (1608) 3.6mm edge pitch.

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
Small	HP-9550	\$4.50	\$3.95	\$3.60
Medium	HP-9552	\$6.95	\$6.25	\$5.50
Large	HP-9554	\$8.95	\$7.95	\$6.95

Close up

UNCLAD PUNCHED LAMINATE

A single 150(L) x 70(W)mm strip of phenolic punched at 0.1" (2.5mm) grid with NO laminate (copper) on either side.

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	HP-9562	\$5.50	\$4.90	\$4.30

ULTRA MINI EXPERIMENTER'S BOARDS

20 holes deep by 16 holes wide with "links" and "strips" (bus rails) every 2 holes. Board measures a compact 65 x 45mm and is extremely versatile. Supplied as a pair, end-to-end. Can be snapped apart to make two boards (dimensions above) or one 130 x 45mm 0.3" wide x 0.1" pitch.

- Ideal for DIL ICs in small numbers.

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	HP-9556	\$4.95	\$4.45	\$3.90

Close up

IC EXPERIMENTER'S BOARD

You can fit dozens of DIL ICs on this board. 30 holes deep x 50 holes wide, with a "link"/"strip" (bus rails) pattern enabling alternate V+ and earth rails. Very versatile.

- Alphanumeric markings on grid pattern
- Dimensions: 140 x 95mm

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	HP-9558	\$6.95	\$6.25	\$5.50

Close up

SPOT FACE CUTTER FOR STRIP BOARDS

The spot face cutter is designed to neatly remove copper strip on strip type prototyping boards. Insert the tool in the pre-drilled hole and rotate it until the track is removed entirely. Easy to use and much more efficient than other methods.

- Dimensions:
Handle: 60(L) x 17(W) x 17(D)mm
Total Length: 110mm

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	TD-2461	\$8.95	\$8.25	\$6.95

ALUMINIUM SHEET

18 gauge 295 x 295mm

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	HM-9500	\$13.95	\$12.35	\$10.95

PERSPEX - RED OR GREY

- 195 x 195mm.
- 3mm thick.
- Supplied with peel-off film

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
Red	HM-9505	\$13.95	\$12.35	\$10.95
Grey	HM-9507	\$13.95	\$12.35	\$10.95

CLEAR ACRYLIC SHEET

General purpose clear acrylic (Perspex) sheet for hobby use. Suitable for displays etc.

- Dimensions: 195 x 195 x 3mm
- Supplied with peel-off protection film

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	HM-9509	\$13.95	\$12.35	\$10.95

BLANK FIBREGLASS PCB

Pure copper bonded to quality fiberglass base.

- HP-9514, 9512, 9510 are single sided
- HP-9515 is double sided
- Ideal for our "ULTIMATE BREADBOARD" - see previous page.

↑	mm	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	150x75	HP-9514	\$5.95	\$5.25	\$4.75
	150x150	HP-9512	\$8.95	\$7.95	\$6.95
	150x150	HP-9515	\$9.50	\$8.50	\$7.50
	300x300	HP-9510	\$19.95	\$17.70	\$15.70

ETCH RESISTANT & WATERPROOF PEN

The ink from the pen is etch-resistant so you have a quick and simple way of making a PCB! Being waterproof it is also great for labelling things on or about the boat, caravan or motorhome. The ink will wash off afterwards with metho, turps, etc.

- Excellent smudge-proof and waterproof qualities
- Dries in seconds
- Low-odour ink
- Xylene and toluene-free ink
- Line width fine approx. 0.6mm

NEW
2015

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	TM-3002	\$4.95	\$4.45	\$4.00

PCB ETCHING KIT

An ideal kit for anyone needing to etch a circuit board - complete with an assortment of copper boards, etchant, working bath and tweezers. It also includes a positive acting photosensitive PCB and developer.

Supplied with:

- 1 x Plastic bath to accept PCBs up to 180 x 110mm
- 1 x Photosensitive single sided PCB
- 1 x Sachet of positive developer for Riston
- 1 x 100g sachet of sodium persulphate etchant
- 1 x Plastic tweezers Assortment of PCB's, instructions

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	HG-9990	\$27.95	\$24.95	\$22.35

ETCH YOUR OWN PC BOARDS BOOKLET

Need just one or two printed circuit boards, for a magazine project or a prototype for your latest design? It's not too hard to etch your own single sided or even double sided boards, especially if you have access to a photocopier or a PC and laser printer. In this tech update we tell you all you need to know.

BOOK

↑	Cat.	Qty 1 +
	BI-8212	\$2.00

AMMONIUM PERSULPHATE - 400GM

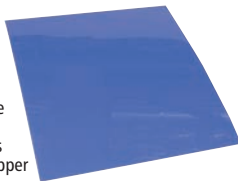
The alternative to ferric chloride. Mix contents (400 grams) with 1.5 litres of hot water to etch copper boards. The contents will treat about 500sq/cm of PCBs.

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	NC-4254	\$12.95	\$11.35	\$10.35

PCB EXPERIMENTING & PROTOTYPING (CONTINUED)

PRESS 'N' PEEL FILM

This is by far the easiest way to make Printed Circuit Boards from CAD software or magazine PCB layout artwork. You simply make the PCB image by putting a Press 'n' Peel sheet of transfer film in the paper tray of a photocopier or laser printer (The sheet size is almost the same as the A4 paper tray). You then print or copy the PCB track image onto the film. Using a domestic clothes iron you press the image onto a pre-cleaned piece of copper clad PCB. The image transfers to the copper and the image will not etch away. Ammonium persulphate or ferric chloride are both OK. You get 5 sheets of 215 x 280mm transfer film in each pack. Full instructions are supplied.



4 Easy Steps:

1. Print or Copy
2. Iron on
3. Peel off
4. Etch



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HG-9980	\$35.00	\$31.45	\$27.95

PCB WASH DEFLUXING SOLUTION

Removes flux and residue from circuit boards to provide an extremely clean and contaminant free surface. The ready to use solution can be safely used in ultrasonic tanks for various applications including: jewellery, metal parts de-greasing, removing flux and cleaning sensitive electronic parts. Appropriate for both static and ultrasonic cleaner use.



- Non-flammable
- Water-based (Biodegradable)

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
1 Litre Bottle	NA-1070	\$12.95	\$11.35	\$10.35

CONDUCTIVE COMPOUNDS

WIRE GLUE

A soldering iron in a jar. Wire Glue is a electrically conductive adhesive that enables you to make solder-free connections when you don't have a soldering iron handy, or aren't able to apply heat for some reason. Hundreds of hobby, trade and electronics uses. Lead-free, cures overnight.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
9ml	NM-2831	\$9.95	\$8.75	\$7.75

CONDUCTIVE CARBON GREASE

Lubricates and improves electrical and thermal connections between sliding surfaces, while providing protection from moisture & corrosion. Excellent for use on switches and EMI shielding applications. Industrial, trade and hobby use. 50 gram tube.

- Prevents normally closed switches from corroding in place.
- Reduces make-break arcing and pitting of switch contact surfaces
- Improves the connection between irregular or pitted contact surfaces
- Reduces EMI noise by maintaining a continuous path between conductive surfaces
- Thermally stable up to 200°C
- Density: 2.7 g/ml
- Electrical resistivity: 117 ohms/cm

SEE PAGE 113 FOR HEATSINK COMPOUND



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
50g	NA-1034	\$9.95	\$8.75	\$7.75

PRECISION CONDUCTIVE INK

This is a highly conductive polymer for use in a variety of applications and is an indispensable tool for fixing damaged circuit board tracks. Apply instant traces on most surfaces (epoxy, glass, plastic, metal). Draw traces on circuit boards, repair defective traces, make jumpers and shield electronics, design prototype circuits and repair rear-window heater traces.

- 1mm track trace width
- 0.02 Ohm per mm resistivity



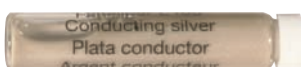
After heat curing only. Use low temperature soldering (less than 180 °C/350 °F) for not more than 5 seconds. Use low temperature soldering iron.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NS-3033	\$34.95	\$31.45	\$27.90

SILVER CONDUCTIVE VARNISH

This silver conductive varnish adheres well to glass, PCB material, ceramics etc. Repairs printed circuits, window antennas, window alarm loops etc. Very good conducting properties.

- Approximately 0.02 - 0.1 Ohms/cm².



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NS-3030	\$12.95	\$11.35	\$10.35

CLEANING PRODUCTS

ISOPROPYL ALCOHOL CLEANING PADS

Removes contaminants from metal, plastic & painted surfaces.

- Also ideal for cleaning computers
- Packet of 10.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Pkt 10	NA-1060	\$4.95	\$4.45	\$3.90

DEOXT PROGOLD CONTACT CLEANER & REJUVENATOR

Simple cleaners wash away dirt, grime, and dust from your expensive equipment but are often ineffective at cleaning tough oxidation and metal sulphide contamination. This product will not only clean, but it will help restore your equipment to its original condition, improving its performance.

- Kit contains:
DeoxIT power booster 7.4ml
DeoxIT ProGold conditioning treatment 7.4ml
2 x brush applicators
4 x swabs
Lint free cloth



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Aerosol	NS-1434	\$24.95	\$22.35	\$19.70
Kit	NS-1436	\$24.95	\$22.35	\$19.70

INOX PREMIUM GRADE MACHINERY GREASE

General-purpose synthetic grease in a handy 30gm tube size. Ideal for bearings, ball joints, chains, sprockets, O-rings, bushes & other rubber and plastic etc.

- Food grade
- High temperature, non-melt
- Highly resistant to water, salt, chemicals and drying
- Fully synthetic



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
30g	NA-1032	\$8.95	\$7.95	\$6.95

ANTI-CORROSION

TEF-GEL ANTI-CORROSION, ANTI-SIEZING, ANTI-GALLING SYRINGE

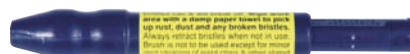


This product is far superior to a similar product we sold last year. Its main use is to prevent dissimilar metals when fastened together from corroding due to galvanic action. For example, you fasten down a stainless steel sail track slide to the metal deck of a yacht; you use this product to prevent dissimilar metal electrolytic corrosion. That's all the other product was good for. This product also stops rotating objects from seizing and prevents galling in stainless steel screw fasteners. It also protects electrical terminals/connectors.

- Will not cold flow or dry out
- Is resistant to salt water and detergents
- Has an indefinite shelf life
- Contains PTFE (Teflon®) and NO (0%) volatile solvents, no silicone, or petroleum solvents. Nothing to evaporate
- It is dielectric (Non-electrical conducting)
- No known hazardous ingredients
- High flashpoint
- Non toxic

↑	Cat.	Qty 1+	Qty 10+
10ml	NA-1040	\$19.95	\$17.95

CORROSION BUSTER PEN



This pen-type product enables you to remove rust, spot corrosion and clean burnt contacts etc, without abrasion utilising the 20,000 tiny glass fibres at the tip of the pen. It has an amply sized body with finger indent to provide a comfortable & secure grip while the adjustable length allows for more aggressive cleaning when required.

- 120mm long x 14mm dia.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1410	\$19.95	\$17.70	\$15.70

AEROSOLS

LITHIUM GREASE

Long-lasting heavy duty lubricant grease for bearings, sliding mechanisms, battery terminals, chains, sprockets or other moving parts. White in colour so it forms a kind of thick, milky sea in the lubricated area. Reduce friction, protects against corrosion.

- 400 gram



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1015	\$9.95	\$8.75	\$7.75

INOX-MX3 LUBRICANT, CORROSION INHIBITOR

This product is similar to popular water displacement products EXCEPT that it does not contain silicone or kerosene based solvents etc. Indeed, it is so benign it can be used around food. It is also ideal for seized nuts or screws, freeing up hinges, door locks, as a cutting or tapping & other machining agent. As the product is non-conductive, it is ideal for removing moisture from car distributors, switches, potentiometers, solenoids etc. It does not dry or wash out in water. You will be delighted with this product.

Two sizes are available:

Cat. NA-1022 125g Pump Pack (can be sent by post)

Cat. NA-1024 300g Aerosol Spray (can't be sent by post)



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Spray Pump NA-1022	\$9.95	\$8.75	\$7.75
	Spray Can NA-1024	\$14.95	\$13.35	\$11.70

PTFE DRY LUBRICANT SPRAY

This water displacing PTFE lubricant is formulated to provide a dry, lubricating film that is perfect for use with electronic & mechanical assemblies, chains & sprockets, rollers, runners, & power tools etc. It prevents rusting on ferrous metals and helps loosen stiff or sticking parts. The spray can be used in automotive, marine and household environments.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	175g NA-1013	\$17.95	\$15.95	\$14.35

CONTACT CLEANER LUBRICANT

A blend of non CFC solvents and RF contact treatment oil. Ideal for cleaning and lubricating non-arcng contacts and mechanisms. Can be used for cleaning & lubricating all types of contacts.

- Safe on most plastics.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	175g NA-1012	\$11.50	\$10.35	\$8.95

CIRCUIT BOARD LACQUER

Non CFC ozone safe propellant. Premium quality flexible coating to protect printed circuit boards from humidity and environmental attack. Special solder through lacquer so previously coated boards can be soldered.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	175g NA-1002	\$11.50	\$10.35	\$8.95

ELECTRONIC CIRCUIT BOARD CLEANER

Non CFC ozone safe propellant. It may not be obvious, but many circuit problems occur when flux and other contaminants (even finger prints) remain on the PCB causing 'leakage' between tracks. If you work with RF, high impedance (i.e. FET Op-Amps etc), ioniser or other circuits, PCB cleanliness is a MUST. The electronic circuit board cleaner is a spray that dissolves flux residues & grime leaving the track work and board absolutely clean. We then recommend that you 'tropicalise' the board with circuit board lacquer (NA-1002)



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	175g NA-1008	\$11.50	\$10.35	\$8.95

DUST REMOVER

Non CFC. Non flammable gas which allows removal of dust from electronic, electrical and optical devices. It does not leave residues and is non toxic and non conductive.

- Much safer than flammable versions sold elsewhere
- 250 grams.

NOTE RE AIRDUSTER:

The Bureaucrats who control these things are trying to virtually ban this useful product. We have stock piled it but once its gone its gone. There - we told you!



NEW LOW PRICE

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	250g NA-1018	\$19.95	\$17.70	\$15.70

FREEZING SPRAY

Non CFC ozone safe propellant. Instant freeze spray for rapidly cooling components to detect intermittent thermal faults, dry joints and overheating problems.

- Non-flammable.
- 250g size.

PLEASE NOTE
AEROSOLS CANNOT
BE SHIPPED BY AIR



NEW LOW PRICE

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	250g NA-1000	\$19.95	\$17.70	\$15.70

BUTANE GAS

Use it for filling up your gas soldering iron, flame torches, cigarette lighters, etc. Includes five different adaptors, which cover most different gas valves.

- Includes filling instructions.



5 adaptors supplied



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	150g NA-1020	\$5.95	\$5.25	\$4.75

ISOPROPYL ALCOHOL 99.8% SPRAY

Isopropyl alcohol is one of the most useful service aids you can have around. It has many of uses such as head cleaning, surface cleaning and prep, contact cleaning, stain removal in the laundry etc. It's also a medical-grade surface disinfectant and is ideal for cleaning your windscreen before you put your new rego label on. Easy to use pump pack spray bottle & dries quickly.

- 99.8% concentration
- 250ml bottle - Cat. NA-1066
- 300 gram Aerosol Can - Cat. NA-1067



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	250ml NA-1066	\$8.95	\$7.95	\$6.95
	300g NA-1067	\$9.95	\$8.75	\$7.75

ELECTRONIC CLEANING SOLVENT

Non CFC ozone safe propellant. A highly efficient fast drying solvent of high purity. For use on delicate electronic, electrical & precision mechanical assemblies (i.e. tuners, switches, plugs, sockets, relays, pots, etc).



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	175g NA-1004	\$11.50	\$10.35	\$8.95

SPRAY-ON CONTACT ADHESIVE

This pressure-sensitive contact adhesive is in an aerosol can, and bonds to paper, fabric, leather, rubber, foam, vinyl, concrete, metal, in fact almost any surface! No more spills and dribbles from a tube, or sticky screwdrivers (and plastic applicators) from applying glue to a surface. Great for laying innerbond and speaker carpet in/on speaker cabinets etc.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	400g NA-1504	\$16.95	\$14.95	\$13.35

ADHESIVES / CLEANERS

3 SECOND SUPER GLUE



Ideal for plastics, wood, rubber, glass, metal and ceramics. It sticks in seconds and needs no clamping. Supplied in a small tube of 3 grams.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1500	\$1.90	\$1.70	\$1.50

EPOXY BOND 34ML

Two part epoxy resin-based adhesive recommended for use where a quick set high-strength adhesive is required. Bonds in approximately 4 minutes to give a colourless, permanent bond. Maximum strength after 1 hour. Ideal for rigid plastics, metal, glass, concrete, china & pottery. Supplied in dual tubes.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1510	\$5.95	\$5.25	\$4.75

J-B WELD EPOXY

The world's finest cold-weld compound. It's an easy, convenient and inexpensive alternative to welding, soldering and brazing. It's a two-part epoxy resin and when mixed together forms a compound as tough as steel. Use it as adhesive, plug filler, sealant or electrical insulator. Like metal, it can be formed, drilled, ground, tapped, machined, filled, sanded and painted. It has an open time of about 30 minutes sets in 4-6 hours, and cures fully in 15-24 hours. It's waterproof, petroleum, chemical, and acid-resistant; resists shock, vibration and temperature variations. Super strong, non-toxic and cleans up with soap and water before setting. Bonds almost any combination of iron, steel, copper, aluminium, brass, bronze, pewter, porcelain, ceramic, marble, glass, PVC & ABS, concrete, fibreglass, wood, fabric - just about any porous/non-porous material.



- Mechanical properties (kPa): Tensile strength: 27300 Adhesion: 12400 / Tensile Lap Shear: 7170
- Shrinkage: 0% / Heat resistance: 260° Celsius
- Contents: 25ml

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1518	\$14.95	\$13.35	\$11.70

LIQUID ELECTRICAL TAPE/THREAD LOCKER

118ML CAN
This liquid can be used instead of insulation tape. Simply brush it on and it will insulate and seal out moisture. Once dry, it is acid & salt resistant and won't crack, peel or harden even under extreme conditions. This is a very versatile product and can be used for such diverse applications as stopping screws from vibrating loose or ropes unravelling. Available in two colours.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black NM-2832	\$24.95	\$22.35	\$19.70
	Red NM-2834	\$24.95	\$22.35	\$19.70

28G TUBES

- Handy 28g tube



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black NM-2836	\$13.95	\$12.35	\$10.95
	Red NM-2838	\$13.95	\$12.35	\$10.95

TAPE

PVC INSULATION TAPE - 20M

High quality insulation tape suitable for wrapping electrical wires.

- Tape thickness: 0.18mm
- Roll Length: 20m
- Self-Extinguished within 2 seconds after being on fire
- Voltage breakdown: 8.0KV



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black NM-2856	\$1.35	\$1.20	\$1.05

COAX SEAL TAPE

This versatile material looks like ordinary PVC electrical tape but is actually a handy sealing system that fuses together to form a removable, waterproof seal once it has been applied. The tape has many uses such as waterproofing outdoor coax connections, sealing low pressure vacuum lines, or even as an alternative to heat shrink tubing when access is difficult.

- 12(W)mm x 1.5(L)mm
- Used by NASA & US Military



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2828	\$12.95	\$11.35	\$10.35

PVC INSULATION TAPE NITTO DENKO

Top quality PVC tape.

- Two sizes and six colours available.
- 18mm wide.



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black 5m	NM-2800	\$0.85	\$0.77	\$0.68
	Blue 20m	NM-2801	\$2.40	\$2.15	\$1.95
	Red 20m	NM-2802	\$2.40	\$2.15	\$1.95
	Black 20m	NM-2803	\$2.40	\$2.15	\$1.95
	White 20m	NM-2807	\$2.40	\$2.15	\$1.95
	Ylw/Gn 20m	NM-2804	\$2.40	\$2.15	\$1.95

INSULATION TAPE - 5M 6 PACK

Contains one roll each of black, white, red, blue, yellow and green.

- 19mm wide.
- Each 5 metres in length.
- Pack will vary from picture.

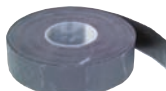


↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Pkt. 6 NM-2806	\$3.45	\$3.05	\$2.75

SELF AMALGAMATING TAPE - 10M

This insulating tape will "cure" into a single mass (once applied) to help seal and waterproof cable, wires or even pipes. The tape has good corona resisting properties and can be used on high voltage cables. Useful where water and chemical resistance is important.

- Corona resistant.
- Chemical resistant.
- Self amalgamating.
- Length: 10 metres.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	10m NM-2826	\$19.95	\$17.70	\$15.70

GAFFER TAPE - 25M

This is not your cheap plastic stuff. It is the genuine cloth-backed tape that you can split with your thumbnail. This waterproof tape is black in colour, low sheen and is the industry standard 48mm wide. Commonly called "100 mile an hour" tape, or "gaffer" tape, it was originally developed for the air conditioning industry.

- It is very adhesive and very strong.
- Ideal for taping down leads on stage.
- Repairing flexible duct work.
- Other public address setups.
- Holding things together in general. A must in every toolbox!



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	25m NM-2810	\$13.50	\$11.95	\$10.70

NASHUA GAFFER TAPE - 40M

PREFERRED BY THE PROFESSIONALS
Genuine Nashua brand Gaffer tape. Professional quality 40 metre rolls in both black and silver. Leaves no residue behind and sticks to most clean surfaces, including carpet. 50(W)mm x 40(L)m. Ideal for



- Outdoor concerts.
- Display exhibitions.
- Theatre.
- Television studios.
- School productions.
- Car racing.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black NM-2812	\$24.95	\$22.35	\$19.70
	Silver NM-2814	\$24.95	\$22.35	\$19.70

DOUBLE SIDED MOUNTING TAPE

Thousands of uses, from mounting PCBs in your project to putting up your Britney Spears posters. Both are double-sided and the NM-2821 is also foam-backed.



- 12mm wide
- Two roll sizes

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	10 metres NM-2821	\$4.95	\$4.45	\$3.90
	25 metres NM-2823	\$3.95	\$3.45	\$3.15

UGLU INDUSTRIAL GLUE STRIPS

Make quick repairs without tools. Simply cut a strip to the size you need, then fix just like double-sided tape to create a permanent, instant bond. Bonds to just about anything - carpet, plastic, canvas, wood, metal, tile, plasterboard, cement, paper, glass, even on rough surfaces. Non-toxic, acid free, no mess. Millions of uses at home, office and workshop. Pack contains eight 75 x 30mm strips.

- Instant bond, permanent hold
- Waterproof and weatherproof
- Removable - Safe for kids to use
- Made in USA

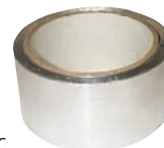


↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1522	\$7.95	\$6.95	\$6.25

ALUMINIUM FOIL TAPE - 50M

To be used in any number of situations including RF shielding.

- Foil thickness: 0.04mm
- Raw material: Aluminium foil, Acrylic-based adhesive
- Width 25mm or 50mm
- Application Temp.: -20 to 120°C



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	50mm NM-2860	\$17.95	\$15.95	\$14.35
	25mm NM-2862	\$11.95	\$10.70	\$9.50

SILICONE RESCUE TAPE - GAFFA TAPE ON STEROIDS



Rescue tape is a self-fusing tape made of the highest quality materials for a permanent air-tight and water-tight seal in emergency situations. Just wrap it around a troublesome leak and it will bond in seconds. The tighter you stretch the tape, the quicker it will bond. Brilliant!

- Resists fuels, oils, acids, solvents, salt water, road salt, UV rays
- Remains flexible to -60°C (-85° F)
- Operating temp range: -65°C to 260°C / -85°F to 500°F
- Continuous temp range: -60°C to 200°C / -76°F to 392°F
- Cold brittle point: -85° F / -65° C
- Tensile strength (Min.): 700 psi
- Elongation (Min.): 300%
- Tear strength (Min.): 85 ppi
- Bond strength (Min.): 2 Lbs
- Water absorption (Max.): 3% By Weight
- Dielectric strength (Min): 400 volts/mil (8,000 V/20 Mil)
- Measures 1" x 12 FT (Approx: 25.4mm x 3657.6mm)



You can repair a burst radiator hose with this!

↑	Cat.	Qty 1+
	NA-2829	\$24.95

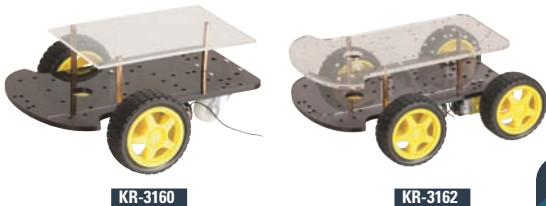
CHASSIS KITS

2 OR 4 WHEEL DRIVE MOTOR CHASSIS ROBOTICS KIT

These two kits make creating your own robot easier than ever. Available in 2WD and 4WD versions; each kit includes motors, wheels, tyres and two pre-drilled mounting plates. These kits are ideal for an Arduino or pcDuino robotics project.

- Pre-Drilled mounting plates.
- One motor + gearbox per wheel
- Motor voltage: 5-10VDC
- Dimensions:

KR-3160 2WD: 215(L) x 160(W) x 100(H)mm
KR-3162 4WD: 240(L) x 160(W) x 100(H)mm



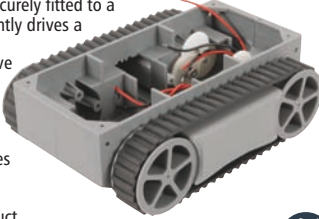
NEW
2015



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
2 Wheel	KR-3160	\$34.95	\$31.45	\$27.90
4 Wheel	KR-3162	\$44.95	\$39.95	\$35.95

ROBOT CHASSIS/PLATFORM - HEAVY DUTY

The vehicle chassis for this unit is an extremely rigid, glass reinforced ABS plastic case, which is almost unbreakable. It comes assembled with 2 x 6V motors with gear trains. Each motor is securely fitted to a 48mm dia driving cog, which independently drives a rubber caterpillar track. The other end is freewheeling, but there is access to a drive shaft on each side. These could accommodate position sensors, or other motors. There are slots in the chassis for PCB's but no electronics is included (6 x AA battery holder is included). Accessories included - gear grease, Allen key.



- A very high quality high integrity product
- Suitable for ages 12+
- Chassis dimension (overall): 172(L) x 130(W) x 60(H)mm



↑	Cat.	Qty 1+	Qty 3+
	KR-3130	\$69.95	\$62.95

DC GEARED MOTOR WITH RUBBER WHEEL

DC geared motor with rubber wheel suitable for your Arduino® vehicle based/robotics applications. Also a suitable replacement for the 2WD (KR-3160) and 4WD (KR-3162) car chassis.

- DC motor: Working voltage 5-10VDC
- Gear ratio: 48:1
- 1 x plastic tyre wheel
- 1 DC Gear Motor
- Bi axial can match speed encoder
- Convenient speed measurement
- Dimensions: 66(Dia.) x 28(W)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2900	\$9.95	\$8.75	\$7.75

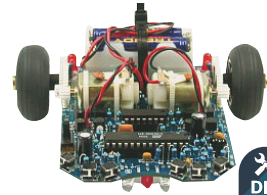
ROBOT CONSTRUCTION KITS

ASURO PROGRAMMABLE ROBOT KIT

Asuro is a kit developed at the German Centre for Air and Space Travel for an autonomous multi-sensor robot. In addition to six collision sensors and an optical unit for following a line, Asuro has two odometers and several display elements. The supplied duplex infrared interface permits wireless programming, as well as a remote control with a PC. The "brain" of the robot is a RISC processor that also permits the processing of complex programs. Programming is carried out in C, where predefined functions can be accessed to actuate the two motors, the sensors and displays. A detailed instruction manual describes the assembly process and the installation of the software as well as step-by-step instructions on programming the Asuro using numerous examples. Asuro is ideal for hobbyists, school and student projects, schools, training in the electrical engineering and mechatronics fields as well as university courses.

This is not a kit for the faint-hearted! Some soldering required.

- Programming required - suitable for 14+



↑	Cat.	Qty 1+	Qty 3+
	KR-3120	\$79.95	\$71.95

PC PROGRAMMABLE LINE TRACER KIT

An educational introduction to the world of robotics and programming. Assemble the kit and you are able to use it in two main ways, programming mode or line tracing mode. With the supplied software you are able to program instructions into the robot to navigate its way across the floor. In line tracing mode, simply draw a line on some paper with a thick black marker and the robot will follow the course. It accomplishes this with two optical sensors, somewhat similar to a common garden bug.



- Assembly time: 2 hours
- Requires: Box cutters, phillips head screwdriver (no.2 size), long nose pliers (TH-1887)
- Requires 2 x AA batteries
- Software is compatible with Windows XP, Vista, and Windows 7 (Vista users may need to run the software in WinXP Service pack 2 compatibility mode)
- Recommended for ages 12+
- Dimensions: 120(L) x 64(W) x 55(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8906	\$34.95	\$31.45	\$27.90

CONSTRUCTION ACCESSORIES

PAN & TILT ACTION CAMERA BRACKET MOUNT WITH SERVOS

Easily create your own camera gimbals for stabilised aerial imaging when combining with a tilt sensor such as the Arduino Compatible Accelerometer Module (XC-4226). This camera mounting bracket kit has two axes allowing pan/tilt movement and comes with two matching servos. Made of nylon plastic and weighing only 39grams, this super light bracket is perfect for FPV use on remote control projects.



- Precise and stable, with clamp for servo wires
- Servos: 2 x Micro SG90
- Weight: 39g

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KR-3164	\$29.95	\$26.95	\$23.70

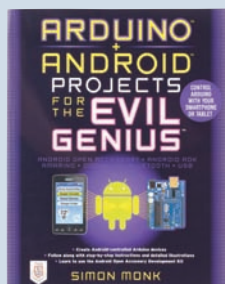
NEW
2015

LET'S FIND EVERYTHING YOU NEED!

ARDUINO + ANDROID PROJECTS FOR THE EVIL GENIUS

Once again, not particularly evil, but another project oriented book written around Android-type mobile phones and the Arduino microcontroller. You can, for example turn your Android phone into a Geiger counter, a TV remote controller, etc. Many projects use both the Arduino and the Android culminating in the creation of a home Automation system.

- Soft cover, 197 pages.
- 215 x 275mm

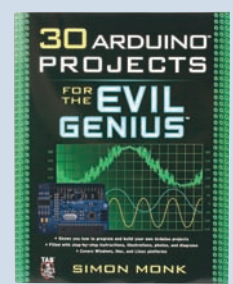


↑	Cat.	Qty 1+
	BM-7135	\$34.95

30 ARDUINO PROJECTS FOR THE EVIL GENIUS

This is a practical project oriented book describing lots of projects based around the Arduino microcontroller. Be warned, there is nothing intrinsically evil about this book. The title is a catchy marketing department trick. It does have, however, 30 practical projects which specify components all most of which are available from Jaycar. Hours & hours of evil fun.

- Soft cover, 191 pages.
- 220 x 275mm



↑	Cat.	Qty 1+
	BM-7134	\$34.95

MOTORS

STANDARD DC MOTORS

THESE ARE NOT TOY MOTORS
Each motor briefly described below is a quality product with hardened drive shaft, sintered bearings and quality commutator brushes etc. They are ideal for any application where a compact high torque and reliable motor is required. Each motor is provided with a full data sheet which includes motor speed/torque/current/efficiency curves etc. Generous discounts for quantity purchases.

- 2.3mm driveshaft
- M2.6 threaded mounting
- Generously ventilated
- Solder tag terminals.



	YM-2712	YM-2716	YM-2718
VOLTAGE (V)	6	12	12
NO LOAD			
Speed (rpm)	16,200	14,500	14,600
Current (A)	0.55	0.28	0.67
AT STALL			
Torque (g.cm)	185	520	2,500
Current (A)	5.6	4.3	18
AT MAX EFFICIENCY			
Efficiency (%)	49.6	66.1	55.1
Power (W)	5.96	5.56	26.5
Speed (rpm)	11,000	10,950	10,850
Torque (g.cm)	80	100	252
Current (A)	2	1.5	4.5
AT MAX POWER			
Speed (rpm)	9,000	8,100	6,500
Torque (g.cm)	80	180	1,300
Current (A)	2.6	2.4	8.0
DIMENSIONS (mm)			
Diameter	27.6	27.6	35.8
Total length	51	57	71
Shaft Length	12.5	13	9.5
Shaft dia	2.3	2.3	3.175
Mounting thread dia	2.6	2.6	3

↑	RPM	Volt	Cat	Qty 1+	Qty 5+	Qty 10+
	16,200	6	YM-2712	\$8.50	\$7.50	\$6.75
	14,500	12	YM-2716	\$9.95	\$8.75	\$7.75
	14,600	12	YM-2718	\$14.95	\$13.35	\$11.70

HOBBY MOTORS

Two models available. Ideal for hobbyist, experimenters, robotics and as replacements.

Cat.	YM-2706	YM-2707
Torque	Low	Medium
Operating volts	1.5-4.5V	1.5-4.5V
Nominal volts	3V	4.5V
Speed (no load)	12000rpm	12500rpm
Current (no load)	0.28A	0.25A
Speed (max eff)	8540rpm	9560rpm
Current (max eff)	0.69A	0.81A
Torque (max eff)	7.94gcm	17.86gcm
Diameter	20mm	23.6mm
Total length	25mm	25mm
Shaft length	8.1mm	6.5mm
Shaft dia	2mm	2mm

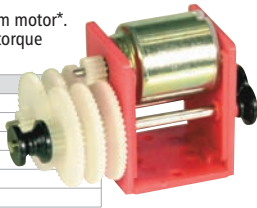


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Low	YM-2706	\$3.50	\$3.15	\$2.75
Medium	YM-2707	\$4.95	\$4.45	\$3.90

LOW COST MOTOR / GEARBOX SET

This unit comes complete with a 3V 12,000 rpm motor*. It can be stepped down (with the consequent torque multiplication) up to six times as follows:

Specifications	RPM
12,000 x 12/48	3,000
3,000 x 12/48	750
750 x 12/48	187.5
187.5 x 12/48	46.875
46.875 x 12/48	11.72
11.72 x 12/48	2.93



The motor is fitted with a 12 tooth pinion and the small gear cluster is 12 tooth. The large clusters are all 48 tooth. Not all gears need to be used. The intermediate output shafts are hardened steel, 3mm dia. Also supplied are press fit pulleys. The whole assembly snaps together. Hand tools are almost unnecessary.
*Motor can also be varied by changing input voltage but this lowers torque.
Motor cage - 40H x 25W x 28Dmm / Gearbox cluster - 40(W) x 25(D) x 30(H)mm
Main & intermediate shafts - 63 x 3mm Dia. Supplied in kit form.

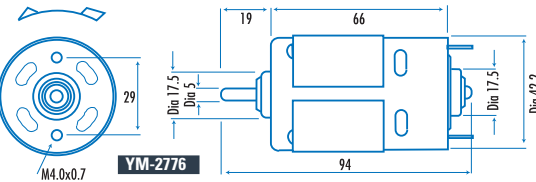
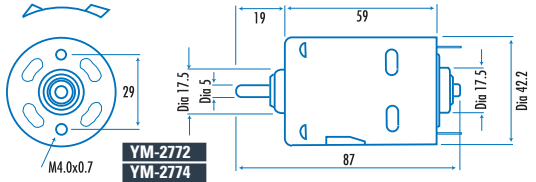
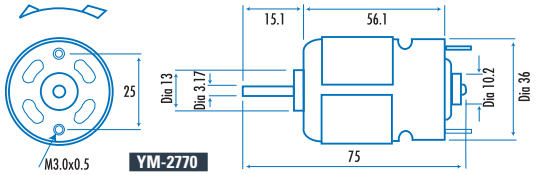
↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2730	\$12.95	\$11.35	\$10.35

STANDARD (HIGH POWER) DC MOTORS

Astonishing speed and power from these compact ferrite magnet type DC motors. All units feature hard steel drive shafts, long life design and are built in an ISO 9002 quality environment.



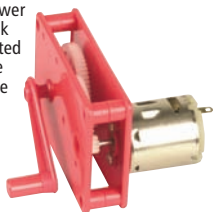
	YM-2770	YM-2772	YM-2774	YM-2776
VOLTAGE (V)	12	6	12	12
NO LOAD				
Speed (rpm)	11,800	20,000	18,800	9,700
Current (A)	0.8	4.0	2.6	1.3
Operating range (V)	6-12	3-6	6-12	6-18
AT STALL				
Torque (g.cm)	2700	1910	4900	6000
Current (A)	26	67	92	57
AT MAX EFFICIENCY				
Efficiency (%)	76	57	71	73
Power (W)	43	45	107	52
Speed (rpm)	9800	13730	15520	8490
Torque (g.cm)	420	320	670	600
Current (A)	4.7	13.5	12.8	6.0
DIMENSIONS (mm)				
Diameter	36	42	42	42
Total length	71	78	78	85
Shaft length	15	19	19	19
Shaft diameter	3.17	5.0	5.0	5.0
Mounting thread	M3	M4	M4	M4



↑	RPM	Volt	Cat	Qty 1+	Qty 5+	Qty 10+
	11,800	12	YM-2770	\$12.95	\$11.35	\$10.35
	20,000	6	YM-2772	\$17.95	\$15.95	\$14.35
	18,800	12	YM-2774	\$17.95	\$15.95	\$14.35
	9,700	12	YM-2776	\$17.95	\$15.95	\$14.35

HAND CRANK DYNAMO WITH GEARED MOTOR

Here's a great gadget that will allow you to add Green power to any of your projects. What we have here is a hand crank dynamo, pre-assembled but easily modified to be retro-fitted to existing equipment or added to new projects. Crank the handle and the specially designed gear set will operate the motor and produce a DC voltage which can be used for a variety of low current uses (charging batteries, lights etc). Crank slowly and the voltage is low, crank harder and the voltage is higher. Made from plastic so it is easy to re-work to fit your projects.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	MD-7000	\$17.95	\$15.95	\$14.35

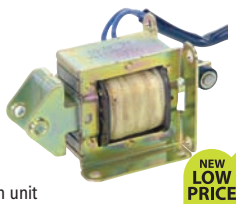
SOLENOIDS & TRANSMISSION COMPONENTS

SOLENOIDS (CONTINUED)

240VAC

Standard steel lamination design Push-pull type. Rated for continuous use.

Specifications	SS-0904
Pull force	9.8N (1.0kg)
Voltage	240VAC 50Hz/60Hz
Stroke	15mm fixed
Total weight	362g



NEW LOW PRICE

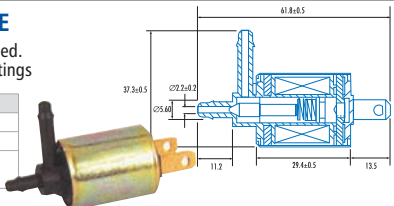
Standard saddle - type actuator. Full data supplied with unit

↑	Cat.	Qty 1+
	SS-0904	\$14.95

12VDC SOLENOID VALVE

Air valve solenoid, normally closed. Standard 1/4" Barb type hose fittings

Specifications	SS-0905
Operating voltage	12VDC
Operating current	350mA
Air Leakage	1cc/min max at 4 PSI



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SS-0905	\$17.95	\$15.95	\$14.35

TAMIYA POWER TRANSMISSION COMPONENTS

SINGLE MOTOR 4 SPEED GEARBOX / AXLE ASSEMBLY

This brand-new Tamiya product features an all plastic moulded gearbox and motor casing. Included is a FA-30 type 3 volt electric motor, axle with 2 crank arm and tube of grease.

These gear ratios are user selectable:
12.7:1 114.7:1
38.2:1 344.2:1



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Single	YG-2740	\$18.95	\$16.95	\$14.95

DOUBLE MOTOR INDEPENDENT 4 SPEED GEARBOX / AXLE ASSEMBLY

Basically a double version of the unit above. Each motor can be separately driven and therefore when wheels are connected could rotate on the spot. Each gearbox is independent so it is possible to set different gear ratios for each box. Includes 2 x FA-30 type 3 volt motors.

The following gear ratios are user selectable:
12.7:1 38.2:1
114.7:1 344.2:1

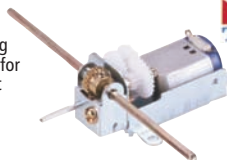


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Double	YG-2741	\$23.95	\$21.35	\$18.95

2 SHAFT UNIVERSAL MOTOR / GEARBOX SET

This gearbox has a main output shaft exiting either side of the gearbox (to drive wheels, for example) and another single-ended shaft at 90° to the former. The gear set can be configured to give 3 set speeds.

- Metal chassis, includes motor.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Universal	YG-2742	\$18.95	\$16.95	\$14.95

CHARGER LEADS FOR RC VEHICLES & TOYS

2MM MALE & FEMALE GOLD CONNECTOR CHARGER LEADS

A range of charger, power and test cables with banana plugs, alligator clips and JST connectors, commonly used for toys, robotics, models, remote control hobby. Supplied with one red and one black quick connect 2mm wire set. Ideally used in battery packs or any other applications where good connection is required but can be easily and quickly removed.

- 1 x 2mm female gold connector, 20AWG silicone wire
- 1 x 2mm male gold connector, 20AWG silicone wire
- Both approximately 100(L)mm each



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	WC-6018	\$4.95	\$4.45	\$3.90

MECHANICAL COMPONENTS FOR DRIVE TRAINS

PULLEY SET

This set would typically be used to transfer power in small energy systems. Set includes 2 x each 50 & 25mm pulleys, 2 x 11mm pulleys, bushings, screws, nuts and 1 metre of rubber drive band. This type of system will absorb transmission shock.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Large	YG-2869	\$12.95	\$11.35	\$10.35

ALUMINIUM HUB WITH SET SCREWS

This device will accept a 6.35mm (1/4") shaft, set screw fixed, and connect to the flat face of a gear, typically the flat side of the larger 48 pitch gears.

- Coupling from the gear to the hub by 4 x set screws provided. This enables a motor to be securely fastened to a driving gear.
- Hub 7/8" (22.5mm) dia.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2784	\$8.95	\$7.95	\$6.95

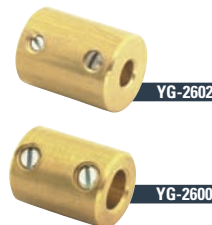
POWER TRANSMISSION COMPONENTS

GERMAN MADE. These precision engineered components are a delight to play with. They offer solutions to small power transmission problems. We make no apologies for the price because well, they are German and they are magnificent quality.

SOLID SHAFT COUPLERS (FEMALE)

Machining from solid brass stock – 16mm long, 12mm diameter. Type I will connect 2 shafts on a common axis. Type II will reduce from 6.0 diameter to 4.0 diameter.

- Shaft fixed with grub screws.



TYPE I Cat. YG-2600
TYPE II Cat. YG-2602

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Type I	YG-2600	\$9.95	\$8.75	\$7.75
Type II	YG-2602	\$9.95	\$8.75	\$7.75

GEAR SET & SPUR GEAR SET

Gear set contains one pinion gear and two different sizes of radio gears. Spur gear set contains three different spur gears.

MAKE YOUR OWN GEARS USING OUR 3D PRINTER ON THE NEXT PAGE



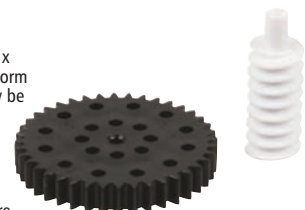
↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Gear Set	YG-2630	\$9.95	\$8.75	\$7.75
Spur Set	YG-2632	\$8.95	\$7.95	\$6.95

WORM DRIVE SET

This set consists of a worm gear 24mm long x 12mm dia with an 8 turn worm screw. The worm has a 2.8mm axle hole which could probably be carefully drilled out to a larger diameter.

The spur gear is 1/4" (6.35 wide) and 1 & 5/8" (41.2mm) diameter with a number of regular pitch-concentric 2.8mm holes across the face of the gear including one dead centre.

It would be drilled out to accommodate a larger shaft. This gear has 40 teeth. Both are moulded in an engineering grade plastic.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	YG-2736	\$9.95	\$8.75	\$7.75



3D PRINTERS

If you've yet to get on board the 3D printer band-wagon, now is the time: This year we've tripled our offering of 3D printers to cater for every level of user, from hobbyist to artist to engineer. For the DIY enthusiast we have the affordable DELTA-style 3D Printer Kit with Arduino Based

Controller (TL-4100) shown below. While for those who want to avoid fun(and build time) of a kit, we have two pre-built models on the next page: A Single-Filament model (TL-4080) and a Dual-Filament model (TL-4090).

3D PRINTER KIT WITH ARDUINO CONTROLLER

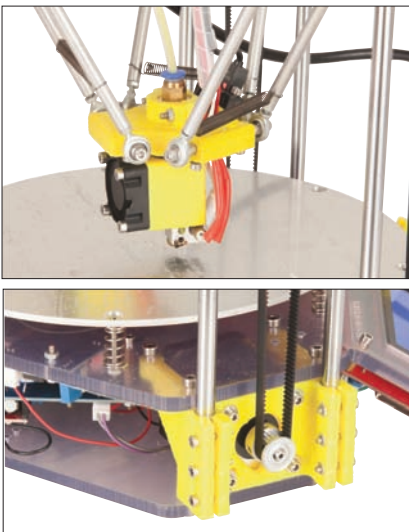
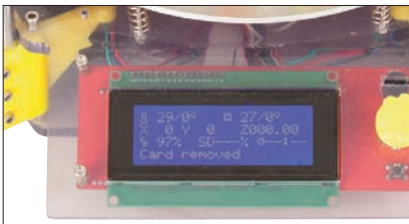
ARDUINO 3D PRINTER KIT SINGLE FILAMENT

This 3D Printer sure looks strange compared to the cubic models we're used to, but don't let that fool you, it is every bit as capable.

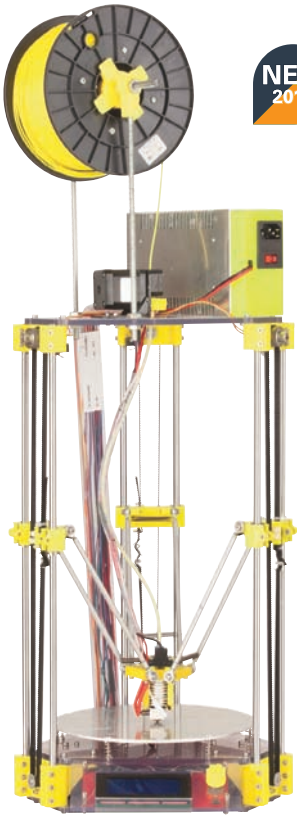
Unlike other Kit 3D printers, this one doesn't require an advanced degree to assemble. Its elegant open-frame delta design makes assembly straightforward and painless. Use either ABS or PLA filament to make virtually any solid object you wish.

The kit includes everything you need to build the printer. Including power supply, motors, controller, extruder and heated bed. The controller also sports an SD card slot, print your objects straight from the card without tying up your computer. The core of the printer is the Arduino-MEGA board (included). Many software packages are available, but we've found Repetier to be the best choice. Join the 3D Printing Revolution today!

- Geometry: DELTA
- Filament Type: PLA/ABS
- Filament Size: 1.75mm
- Heated Print Bed
- Maximum Print Size 220mm diameter
- Dimensions: 800(H) x 300(W) x 265(D)mm



NEW
2015



Note: Filament available separately

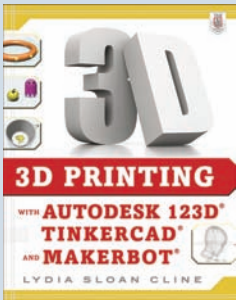
	Cat.	Qty 1+	Qty 3+	Qty 6+
↑ Kit Form	TL-4100	\$699.00	\$629.00	\$559.00

LET'S FIND EVERYTHING YOU NEED!

DIY 3D PRINTING BOOK

This book compiled on 3D printing with Autodesk 123D, Tinkercad, and MakerBot reveals how to turn your innovative ideas into physical products that you can use or sell! This book will guide you to how to operate powerful, free software from Autodesk and bring your creations to life with the MakerBot - a leading consumer printer - or an online service bureau. The included practical lessons take you through the Design, Catch, Meshmixer, Tinkercad, Make, and CNC Utility apps, and the MakerBot Desktop. Fun projects, easy-to-follow instructions, and clear screenshots progress from installing the software to printing the design. Videos and digital files accompany this hands-on guide.





- Make your own creations with Design and Tinkercad
- Download editable, premade content
- Generate construction documents with the LayOut feature
- Create and edit a reality capture model with Catch
- Edit and mash up .stl files with Meshmixer
- Navigate the MakerBot Desktop
- Print the model on your own machine or with a service bureau



NEW
2015

	Cat.	Qty 1+
↑ Softcover, 302 pages. 274 x 216mm	BM-7122	\$39.95

LET'S FIND EVERYTHING YOU NEED!

<p>FROM \$14.95 TL-4112</p>  <p>FILAMENT P37</p>	<p>FROM \$14.95 TD-2128</p>  <p>NEEDLE FILE SET P143</p>	<p>FROM \$24.95 TD-2468</p>  <p>MINI ENGRAVER P136</p>	<p>FROM \$11.50 NP-4260</p>  <p>POLYMORPH PELLETS P26</p>
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3D PRINTING

PRE-BUILT 3D PRINTERS

PRE-BUILT SINGLE FILAMENT 3D PRINTER

This 3D Printer is fully assembled and ready to use, yet won't break the bank. Unlike some other open frame 3D printers, this unit features a beautifully designed red acrylic enclosure.

Turning your 3D models into solid objects has never been easier. The user-friendly REPETIER-HOST software package makes printing your designs straightforward and painless. REPETIER supports both Cura and Slic3r "Slicing" software and offers "EASY" and "Advanced" modes to cater for users off all experience levels. The filament spool slots neatly into the side compartment giving the printer a sleek and tidy look. Join the 3D-Printing revolution today!

- Sturdy Acrylic Enclosure
- REPETIER-HOST Software (Other software available)
- Cura and Slic3r Slicing Software
- Internal filament compartment.

Specifications	TL-4080
Nozzle	0.4mm
Filament Material	ABS, PLA
Filament Diameter	1.75mm
Maximum Print Size	100 x 150 x 80mm
Minimum Layer Size	0.1mm
Interface	USB
Supported OS	Windows, Linux, Mac® OS X
Power	240VAC
Dimensions	300(W) x 230(D) x 298(H)mm
Weight	10kg

Note: Printing medium-large size objects in ABS without a heated or adhesive bed can be problematic. Results depend on object geometry, print speed and many other factors. While it is possible to print ABS on a cold bed by using adhesive, customers wishing to make larger or frequent ABS prints are strongly advised to consider TL-4090.



	Cat.	Qty 1+	Qty 3+	Qty 6+
Single Filament - Pre-Built	TL-4080	\$999.00	\$899.00	\$799.00

PRE-BUILT DUAL FILAMENT 3D PRINTER

This is our most powerful 3D printer. Capable of printing with two colours and/or materials simultaneously, this printer allows you to create far more complex and dynamic prints than ever before. It sports an extremely well constructed open-frame sheet metal enclosure, and an intuitive graphical LCD interface. This printer does not require a computer in order to print! While the printer can be controlled by a computer running Replicator-G host software, it is ideally used as a stand alone unit, printing files from an SD card! Now you can print without tying up your computer. The printer provides a heated bed and generously sized glass print plate. Bring your designs into the real world now!

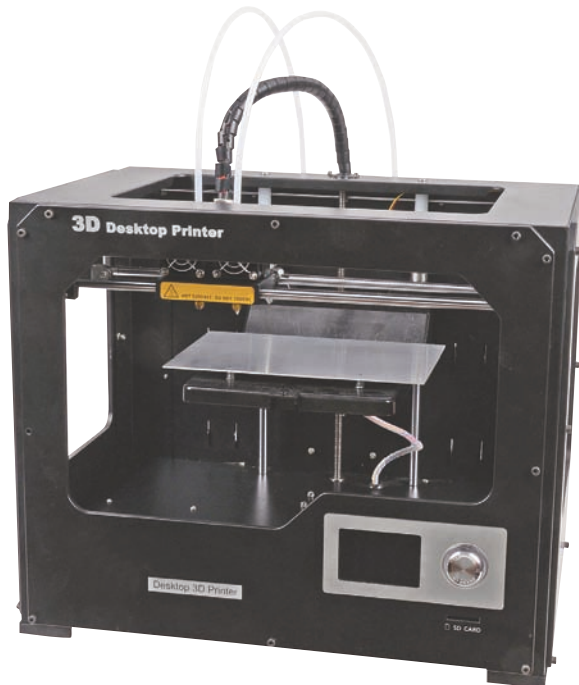
* While a computer is not required in order to print a file from SD card, a computer is required to process 3D models into a printable file.

- Dual Filament Extruders
- Graphical LCD Screen
- USB & SD Card Interface
- Aluminium Heated Bed with glass build plate.
- Sturdy metal enclosure
- Replicator-G and Makerbot Software.

Specifications	TL-4090
Nozzle	2 x 0.35mm
Filament Material	ABS, PLA
Filament Diameter	1.75mm
Maximum Print Size	230(W) x 150(H) x 165(D)mm
Minimum Layer Size	0.1mm
Interface	USB, SD card
Supported OS	Windows
Power	240VAC
Overall dimensions	465(W) x 315(H) x 390(D)mm
Weight	11kg



Prints two colours simultaneously



	Cat.	Qty 1+	Qty 3+	Qty 6+
Dual Filament - Pre-Built	TL-4090	\$1,399.00	\$1,259.00	\$1,119.00

3D PEN - FREE STYLE CONSTRUCTION

3D PEN

Construct 3D objects in a more natural way. No need to fiddle around with vertices or splines in a complex 3D program. Just hold the pen in your hand and start creating. The pen will melt the inserted plastic and produce a thin extrusion that hardens quickly allowing you to draw a 3D object. There are no size limitations that 3D printers have, you're only limited by the laws of physics.

- Power supply: 24VDC 1.5A
- Nozzle Diameter: 0.7mm
- Pen weight: 160g
- Dimensions: 170(L) x 44(Dia)mm

Plastic to suit:

- 1.75mm 3D Filament PLA - 1kg - TL-4060
- 1.75mm 3D Filament ABS - 1kg - TL-4070



TL-4050



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
3D Pen	TL-4050	\$129.00	\$115.95	\$102.95
1.75mm 3D Filament PLA - 1kg	TL-4060	\$54.95	\$49.45	\$43.90
1.75mm 3D Filament ABS - 1kg	TL-4070	\$49.95	\$44.90	\$39.90

3D PRINTER ACCESSORIES

FILAMENT FOR 3D PRINTERS

These rolls of PLA or ABS Filament suit most 3D printers, including the TL-4020 Velleman model TL-4050 3D Pen Kit, and our 3 new printers on the previous page.



ABS (Acrylonitrile butadiene styrene) is an impact resistant and tough oil based material made from styrene, acryl and butadiene. It has a higher melting point compared to PLA, requires a heat bed during the printing process, but is stronger and more flexible.

PLA (Polylactic acid) is a biodegradable, environment-friendly plastic with a shiny, glossy appearance. It doesn't have the notable smell of hot plastic, compared to ABS during the printing process. Can provide sharper detail compared to ABS, doesn't necessarily need a heat bed but benefits from cooling during the printing process.

Note: 3mm not suitable for 3D Pen

ABS 3D FILAMENT - 1KG:

↑	Dia.	Colour	Weight	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.75mm	Black	1kg	TL-4070	\$49.95	\$44.90	\$39.90
	3.00mm	Black	1kg	TL-4072	\$49.95	\$44.90	\$39.90

PLA 3D FILAMENT - 250G:

↑	Dia.	Colour	Weight	Cat.	Qty 1+	Qty 3+	Qty 6+
NEW	1.75mm	Black	0.25kg	TL-4110	\$14.95	\$13.45	\$11.95
NEW	1.75mm	Red	0.25kg	TL-4112	\$14.95	\$13.45	\$11.95
NEW	1.75mm	Clear	0.25kg	TL-4114	\$14.95	\$13.45	\$11.95
NEW	1.75mm	Green	0.25kg	TL-4116	\$14.95	\$13.45	\$11.95
NEW	1.75mm	Blue	0.25kg	TL-4118	\$14.95	\$13.45	\$11.95
NEW	1.75mm	Yellow	0.25kg	TL-4120	\$14.95	\$13.45	\$11.95
NEW	1.75mm	White	0.25kg	TL-4122	\$14.95	\$13.45	\$11.95

PLA 3D FILAMENT - 1KG ROLL:

↑	Dia.	Colour	Weight	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.75mm	Black	1kg	TL-4060	\$54.95	\$49.45	\$43.90
	3.00mm	Black	1kg	TL-4062	\$54.95	\$49.45	\$43.90

PARTS FOR ORIGINAL TL-4020 3D PRINTER

TL-4020 3D PRINTER CUSTOMERS

The parts listed below will keep your TL-4020 K8200 3D printer in tip-top performance condition for years. We have decided to provide a 40% discount on these products for TL-4020 owners. In order to secure your spares, order them NOW so you won't be disappointed when they get scarce! Order through your local store, or ring our Techstore on 1800 022 888.

Note: Not available at all stores but can be ordered



TL-4030



TL-4031



TL-4033/4



TL-4035



TL-4038



↑	Spare Parts	Cat.	Qty 1+	Qty 3+	Qty 6+
	Extruder	TL-4030	\$239.00	\$219.00	\$190.95
	Rubber Toothed Belt - 1.5m long	TL-4031	\$39.95	\$35.90	\$31.90
	3m Multi-Colour Flat Cable	TL-4032	\$14.95	\$13.35	\$11.70
	Linear Bearings 8mm	TL-4034	\$6.95	\$6.25	\$5.50
	Linear Bearings 10mm	TL-4033	\$6.95	\$6.25	\$5.50
	Stepper Motor 2.5 A Step 1.8	TL-4035	\$69.95	\$62.95	\$55.95
	Flexible Z Axis Coupler 5mm x 8mm	TL-4036	\$32.95	\$29.45	\$26.50
	Square Nut M5 7.8 x 7.8mm	TL-4037	\$0.95	\$0.85	\$0.75
	100K NTC Thermistor 1206 SMD	TL-4038	\$6.95	\$6.25	\$5.50
	100K Thermistor for Extruder	TL-4039	\$6.95	\$6.25	\$5.50
	Glass Panel 215mm x 215mm x 3mm	TL-4040	\$24.95	\$22.35	\$19.70
	Stepper Motor Driver	TL-4043	\$39.95	\$35.90	\$31.90
	Controller Board	TL-4044	\$449.00	\$405.00	\$359.00
	Nozzle Assembly	TL-4046	\$34.95	\$31.45	\$27.90
	Set of Black Plastic Parts	TL-4047	\$109.00	\$89.95	\$79.95

3D PRINTER CONTROLLER MODULE TO SUIT TL-4020 3D PRINTER

Fully operate your TL-4020 3D printer with this module without a PC! This module features an SD card slot, simply place your 3D object file onto the SD card then slot it in to print. Includes real time temperature display and control of the extrude & heated bed temperature. Pre-assembled however the connection cable requires soldering.

- SD card slot • Reset button
- Dimensions: 80(L) x 50(W) x 45(D)mm

Note: You will still require a PC to slice and prepare the 3D file.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TL-4022	\$169.00	\$151.95	\$134.95

3D PRINTER LED LIGHT TO SUIT TL-4020

Suitable for use with the TL-4020 K8200 3D printer kit, this pre-assembled unit will illuminate your 3D object while being printed.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TL-4024	\$39.95	\$35.90	\$31.90

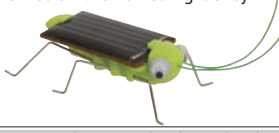
ROBOT & GREEN POWER KITS

LEARN ABOUT GREEN POWER

SOLAR POWERED GRASSHOPPER KIT

Are your children fascinated with insects? This mini solar powered grasshopper is easy to assemble and will keep them occupied for hours. Runs from sunlight or by a 50W halogen bulb. Small enough to fit in the palm of their hand!

- Suitable for ages 8+
- Dimensions: Approx 40mm long



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	GT-3751	\$12.95	\$11.35	\$10.35

6 IN 1 SOLAR EDUCATIONAL ROBOT KIT

A hands on experience in the world of solar power. This kit includes all the parts needed to construct up to six different projects. Choose between a robot, helicopter, plane, windmill, water skier or even a three wheeler! Don't even worry about screws, everything snaps together for easy assembly and its all solar powered so no batteries are required. For the best results, use it in direct sunlight. For cloudy days use a 50W halogen light.

- Suitable for ages 10+



Specifications	KJ-8936
Dimensions (Approx)	185 x 185 x 190mm
Windmill	234mm
Helicopter	140 x 75 x 95mm
Water skier	65 x 50 x 60mm
Three wheeler	50 x 85 x 45mm
Robot	185 x 185 x 130mm
Plane	



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
6 in 1	KJ-8936	\$12.95	\$11.35	\$10.35

6-IN-1 SOLAR EDUCATIONAL KIT

A brilliant kit for any junior eco-scientist. You can build any one of six different projects from the parts in the kit, then make them work by solar power. No tools, soldering or glue required. All the parts snap together with spring terminals for the wiring. The instructions are excellent with extremely clear and concise illustrations detailing every step. The finished projects are solar powered, but can also be powered by the light from a household 50W halogen light.

- Projects:
- Windmill
 - Car
 - Dog
 - Plane
 - Airboat
 - Revolving Plane
- Suitable for ages 10+



Thousands Sold!

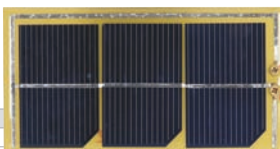


↑	Cat.	Qty 1+	Qty 3+	Qty 6+
6 in 1	KJ-8926	\$12.95	\$11.35	\$10.35

HOBBY SOLAR MODULE

Ideal for powering solar projects, hobbies, model solar cars and educational applications. 3 cells per module, rated at 1.5V.

Specifications	ZM-9012
Open circuit voltage	1.5V
Short circuit current	500mA
Dimensions	148(L) x 74(W)mm
Weight	33g



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	ZM-9012	\$19.95	\$18.70	\$17.70

"T4" TRANSFORMING SOLAR POWERED ROBOT KIT

The basis of this kit is two moulded 'frames' of component parts reminiscent of a plastic model aeroplane kit - about 50 parts! It also has a small (40 x 25mm) solar panel, a tiny electric motor, gears, pinions, etc. It also includes decals. It can 'transform' between a T-Rex or Rhino beetle with moving legs and jaw, Robot with walking legs and moving wheels, and a futuristic miners drilling machine with moving drilling bit and wheels. You will probably need a small diagonal pliers to cut out and de-flash all the plastic parts from the frame.

- Robot stands about 100mm tall
- Detailed 34 page assembly manual is also included.
- Suitable for ages 8+



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
4 in 1	KJ-8965	\$24.95	\$22.35	\$19.70

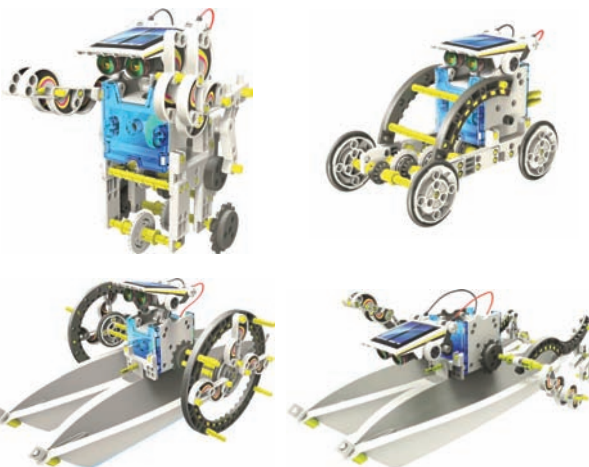
SOLAR POWERED ROBOT KIT - 14 IN 1 ROBOT KIT

This kit has so many included parts we don't have the time to count them, certainly at least 100 or more. Notable are a solar panel, solar powered electric motor boat hull components, gears etc. This kit can be transformed into 14 different functional robots, some of which admittedly are whimsical, but the kit itself is a fantastic learning experience: Mechanical, educational, scientific & solar physics skills are exercised. Best of all the kit comes with an assembly manual that is LEGO® like in the clarity of description. The manual itself runs to over 80 pages. This kit represents sensational value and is perfect for bright kids 10+ years. (A side cutter is really required to clip all of the parts out of the moulding frames - try TH-1897).

This kit can be assembled into:

- Turtle-bot
- Beetle-bot
- Boat-bot
- Walker-bot
- Dog-bot
- Wheel-bot
- Roly Poly-bot
- Auto-bot
- Slither-bot
- Surf-bot
- Zombie-bot
- Crab-bot
- Quadro-bot

- Dimensions (Boat - bot): 245(L) x 170(W) x 100(H)mm
- Suitable for ages 10+



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
14 in 1	KJ-8966	\$27.95	\$24.95	\$22.35

LEARN ABOUT GREEN POWER (CONTINUED)

DELUXE SOLAR EDUCATIONAL KIT

A series of do-it-yourself experiments to acquire the basic knowledge of solar energy. Supplied with a solar panel which incorporates 3 x 1.5V cells for series or parallel connection.

The kit comes complete with:

- Solar cell module with plastic stand
- Musical unit
- Plastic lamp
- Small DC motor with stand
- Wire with motor clips
- 4 jumper wires
- Nuts and plastic spanner
- Colour spinner discs
- Paper aeroplane and bird models
- Plastic turntables with 4 sizes, 5/8", 1", 1.5 and 2 inch
- Plastic fan spinner
- 14 page solar energy booklet explaining the why & hows of solar energy
- Suitable for ages 8+



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-6694	\$29.95	\$26.90	\$23.70

SOLAR EDUCATIONAL KIT

Experiment with solar energy - the energy source of the future. Our solar educational kit is designed to let you build your own solar models. The kit comes complete with:

- Solar cell module
- Solar energy booklet explaining the why & hows of solar energy
- Small DC motor
- Screws and nuts
- Wire with motor clips
- Colour spinner discs
- Paper aeroplane and bird models
- Plastic turntables with 4 sizes, 5/8", 1", 1.5" and 2"
- Plastic fan spinner
- Suitable for ages 8+



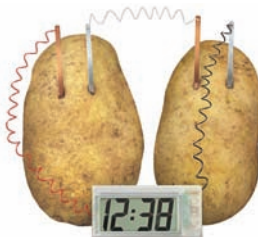
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-6690	\$18.95	\$16.95	\$14.95

SCIENCE PROJECT KIT

POTATO CLOCK

You can generate enough electricity to run a digital clock by plugging electrodes into common potatoes! An amazing chemical experiment which also works with tomatoes, lemons, apples - even soft drink or beer! All parts (except fruit/veg) supplied including:

- Highly accurate digital clock module
- Metal electrodes, wire
- Instructions and fluid beakers Perfectly safe for children and highly educational. (Do not eat fruit/veg after making as batteries)
- Clock dimensions: 65(W) x 30(H) x 12(D)mm
- Suitable for ages: 10+



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8937	\$12.95	\$11.35	\$10.35

SALT WATER FUEL CELL ENGINE CAR KIT

An entertaining educational kit demonstrating the concept of a salt powered automotive engine. It gives the next generation a look at alternative means of propelling cars of the future. It works with a combination of salt water and magnesium plates. When salt water is added it dissolves the magnesium to form hydrogen which is attracted to the cathode creating a flow of electrons. A detailed step by step assembly manual for connecting the myriad of components is included and the car engine can be configured as a V8 or flat engine. The cylinders also move up and down as the car moves forward. The finished vehicle is 4 wheel drive and the body will twist as it navigates its way over small pebbles and bumps. Watch a demonstration video on our website. You may require the use of a side cutter and flat/phillips head screwdrivers.



- Assembly time: 3 hours
- Suitable for ages 8+
- Dimensions: 120(L) x 100(W) x 91(H)mm

Ramp not included

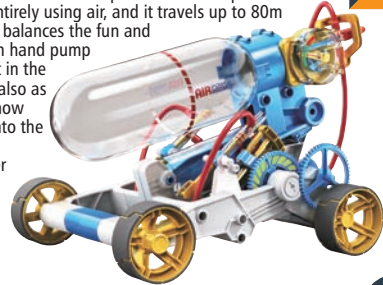


↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +	
	Salt Water Fuel Cell Engine Car Kit	KJ-8960	\$24.95	\$22.35	\$19.70
	Spare Cartridge	KJ-8961	\$6.95	\$6.25	\$5.50

AIR POWER ENGINE CAR KIT

A green powered car! No batteries or motors required and it is not even subject to weather conditions like its solar powered counterparts. This futuristic car kit operates entirely using air, and it travels up to 80m on one single tank. This kit balances the fun and learning perfectly. A built-in hand pump with pressure meter is built in the car for easy operation and also as an indicator in measuring how volume of air is collected into the tank. Build this fun and educational kit and discover and learn about air pressure, pumps, valves, transfer of energy and green power, all that with the thrill of a speedy car!

NEW
2015



- Suitable for ages 10+!



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8967	\$29.95	\$26.95	\$23.70

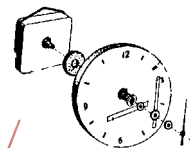
CLOCK MAKING

QUARTZ CLOCK MOVEMENT

MAKE A CUSTOM CLOCK OR REPAIR AN OLD ONE

This is a standard hour/minute/second movement found in almost all electric clocks worldwide. Very reliable. Standard nut bushing mount. We have sold 10's of thousands of these and, as far as we can tell, not one has come back.

- Very compact 56 x 56 x 15mm
- Self starting one second stepping motor
- Uses 1 x AA battery that lasts 1 year
- ±15 second/month accuracy
- Supplied with three sets of hands
- Shaft length 19mm, diam. 7.5mm
- Includes sweep second hand.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0100	\$15.95	\$14.35	\$12.70

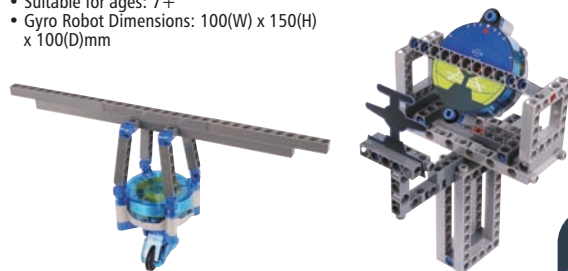
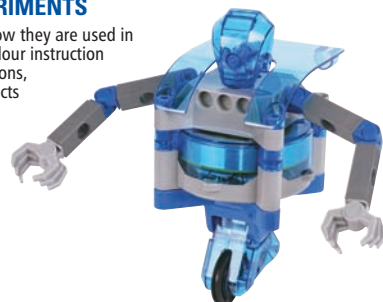
ROBOTIC CONSTRUCTION KITS

GYRO ROBOT - 7 EXPERIMENTS

Learn about Gyroscopes and how they are used in the real world. The included colour instruction manual has Lego® like instructions, making each of the seven projects very easy to build:

- Robo Gyro
- Gyro Compass
- Gyrorector
- Segway
- Rope Walker
- Balance Game
- Flight Simulator

- Requires 3 x AAA batteries
- Suitable for ages: 7+
- Gyro Robot Dimensions: 100(W) x 150(H) x 100(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8957	\$49.95	\$44.90	\$39.90

ROBOTIC CONSTRUCTION KITS (CONTINUED)

FRILLED LIZARD ROBOT KIT WITH IR SENSOR

A super smart frilled lizard with artificial intelligence. It has an infrared sensor that is programmed to 'escape' or 'follow-me'. Once the infrared sensor is activated in the 'escape' mode the robot will automatically act shocked by spreading its frill, dropping its jaw, illuminates its bicolor LED eyes and will scamper away from you until it reaches a safe place. If the infrared sensor is switched to the 'follow-me' mode using the 2 way function switch, then the robot will assess danger by bluffing the attacker (unfurling and shaking its frill). When the robot does not sense danger it will proceed to follow you like a pet lizard.

- Interactive artificial intelligence (AI)
- Two funway modes
- Infrared sensor
- LED illuminated eyes
- Requires 4 x AAA batteries
- Dimensions: 370mm long
- Suitable for ages 10+



NEW
2015



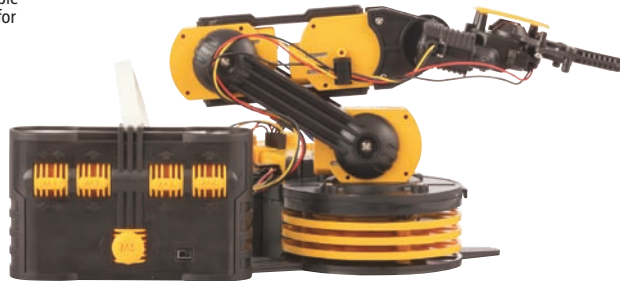
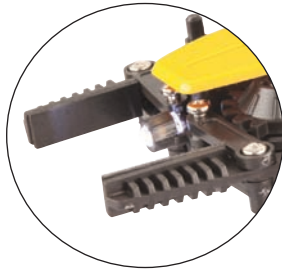
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8968	\$49.95	\$44.90	\$39.90

ROBOT ARM KIT WITH CONTROLLER

This arm is a must for budding robot enthusiasts and operates just like the real thing. It is capable of 5 separate movements and can easily perform complex tasks. Individual control is available for opening and closing the illuminated gripper plus control of wrist, shoulder, elbow and base rotation. The arm is supplied as a kit of parts and makes an excellent project for anyone interested in robotic construction and basic electrical connections.

- Suitable for ages 12+

Specifications	KJ-8916
Max lift capacity	100g
Gripper opening	43mm
Maximum reach	320mm
Wrist movement	120°
Elbow movement	300°
Shoulder movement	180°
Base rotation	270°
Requires	4 x D cells
Base dimensions	225(L) x 160(W) x 40(H)mm



USB INTERFACE KIT FOR KJ-8916

Add computer control via USB to your Robotic Arm. The kit includes everything you need - interface cable, pre-built PCB, enclosure and software for controlling function. You can use a keyboard or mouse to have real-time control of the robotic arm, or you can program, edit and load individual functions and movements, just like a real industrial robot. The commands are saved just like a normal computer file to be loaded and used later.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Robot Arm with Controller	KJ-8916	\$59.95	\$53.95	\$47.90
USB Interface Kit	KJ-8917	\$39.95	\$35.90	\$31.90

3 IN 1 ALL TERRAIN TRACKED ROBOT

There are a lot of parts to assemble in this kit, including the hard-wire remote control. You do, however end up with a fantastic piece of robotic gear. It is primarily a terrestrial 6 track (i.e. 3 separate tractor-crawlers each side) unit. The crawlers can be reconfigured to operate as grippers, or even as a forklift type mechanism. You will need lots of time to put this thing together, but it will be a pleasure as the 50 page instruction manual is superb with dozens of good old-fashioned line drawings, which are still the best for clarity. There is very little electronics (indeed none really) but a tremendous amount of mechanical assembly. Electric motors are included.

This kit could form the basis of a sophisticated robotic platform with the addition of feedback systems, much of which is in the Jaycar catalogue.

- It would make a fabulous gift for a very bright 13+ year old
- Batteries AA x 4 are extra
- Carton dimensions 40(W) x 30(D) x 90(L)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8918	\$59.95	\$53.95	\$47.90

ELECTRONIC & ELECTRICAL PROJECTS FOR KIDS

ELECTRONIC PROJECT SNAP-ON KIT WITH 80 EXPERIMENTS

Totally snap-on for ease of construction. Features 80 projects which demonstrate various theories of electronics. A great educational tool for primary age school students that will stimulate their neural pathways as they read and construct an array of devices that use circuits, switches, electric motors, LEDs and more. Some of the projects include magnets or switch controlled electric fans, switch controlled LEDs, switching multi-directional electric motor, sound effect machine that will output machine gun fire, police car siren and much more.

- Learn whilst building over 80 electronic experiments
- No tools or soldering required
- Components simply snap together
- Includes full colour instruction manual
- Requires 2 x AA batteries
- Suitable for ages 6+
- Package dimensions: 265(L) x 205(W) x 35(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8970	\$22.95	\$20.35	\$18.35

CAR & BOAT SNAP-ON ELECTRONIC PROJECT KIT WITH 50 EXPERIMENTS

Simple snap together project kit allows you to create a car or a boat that will move! Bright colour pieces and no need to screw, or use adhesives. Great little kit for teaching simple electronic principles to eager minds. Projects include magnet controlled lamp or fan, air propelled car, and underwater or air propelled boat.

- Learn whilst building over 50 electronic experiments
- No tools or soldering required
- Components simply snap together
- Includes full colour instruction manual
- Requires 2 x AA batteries
- Suitable for ages 6+
- Package dimensions: 460(L) x 330(W) x 40(D)mm

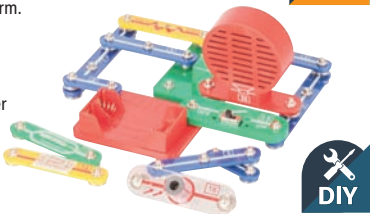


↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8972	\$27.95	\$24.95	\$22.35

BURGLAR ALARM SNAP-ON ELECTRONIC PROJECT KIT

A simple snap-on project kit to create burglar alarms and more. Simply clip the clearly marked and bright coloured pieces together to learn various circuits designs. Some of the projects include anti-theft alarm that fires themed warning sounds when circuit breaks, door/window alarm using a dry reed switch and even a rain alarm.

- Learn whilst building 8 electronic experiments
- No tools or soldering required
- Components simply snap together
- Includes full colour instruction manual
- Requires: 2 x AA batteries
- Suitable for ages 6+

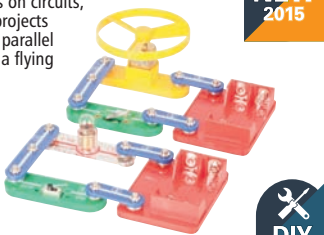


↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8974	\$11.95	\$10.70	\$9.50

8-IN-1 SNAP-ON ELECTRONIC PROJECT KIT

A simple and fun snap on electronic project kit to engage young minds. Various experiments on circuits, motors, switches and more. Some of the projects include lamps and fans in both series and parallel circuit with variable controls; there is also a flying saucer project that really flies.

- Learn whilst building 14 electronic experiments
- No tools or soldering required
- Components simply snap together
- Includes full colour instruction manual
- Requires: 2 x AA batteries
- Suitable for ages 6+



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8976	\$12.95	\$11.35	\$10.35

PRINCIPLES OF ELECTRIC CURRENT EXPERIMENT KIT

A series of experiments with instructions to learn the common principles of electric current and magnetism. Check the magnetic poles of each coil with the compass, use some paper clips, the magnet and enamelled wire to create a spinning motor, or check the flow of current in the circuit by switching the battery thus inverting the current and magnetic field.

- Assembly time: 30 minutes
- Requires 2 x D batteries, scissors, and tape
- Recommended for ages 8+
- Dimensions: 99(L) x 70(W) x 45(H)mm



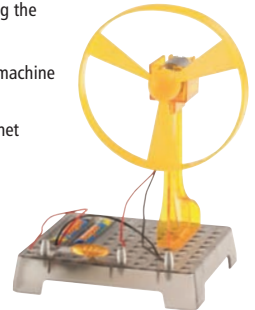
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8901	\$12.95	\$11.35	\$10.35

12 IN 1 ELECTRICAL EXPERIMENT KIT

12 different experiments to construct that demonstrate various electronic principles. Learn about static electricity, electric motors, resistors, diodes, lights, solar power and more. Kit included a manual with excellent information describing the theory and history associated with each experiment.

- Activities:
- Static Electricity
 - Conductors and insulators
 - Make a fan
 - Resistor
 - Diode
 - Make a light
 - Make a Morse code machine
 - Light control alarm
 - Make a bell
 - Make an electromagnet
 - Make a motor
 - Solar power cell

- Assembly time for each experiment: Approximately 10 mins
- Requires 2 x AA batteries
- Recommended for ages 8+
- Base dimensions: 120(L) x 99(W) x 23(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8919	\$27.95	\$24.95	\$22.35

BALLOON POWERED HELICOPTER PROPULSION KIT

This simple little kit demonstrates how helicopter flight is possible. Assemble the blades, blow up the balloon then attach to the blade axle and the air from the balloon will pass through a passageway of each blade causing them to spin. This rotational motion, coupled with the angled blade design allows for enough downward force for the kit to fly.

- Assembly time: 43 seconds
- Suitable for ages 5+
- Dimensions: 260(Dia) x 30(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	KJ-8908	\$5.95	\$5.25	\$4.75

A BIT OF FUN

AUTOMATED ELECTRONIC BUGS

Keep your kids entertained for hours with these small robotic creatures that fit into the palm of their hands! These autonomous, high speed creatures mimic the behavior of an insect. They will run and scurry around on an even floor, table and flat surface. They have the ability to change direction if they hit an obstruction or wall and can also flip upright if they end up on their back. The vibrating motor inside this creature rotates a counterweight and propels the robotic creature forward. A fun and safe way to entertain the kids for hours. They are the perfect collectible robot pet for your kids. Collect them all!

- Assorted Colours
- Batteries included
- Dimensions: 45(L) x 17(W)mm
- Suitable for ages 5+



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Sold Each	YG-2891	\$5.95	\$5.25	\$4.75

MICROSCOPES

MICROSCOPE WITH SMARTPHONE MOUNT

This 41-piece microscope set has everything the budding home-scientist needs. With a wide-angle eyepiece, colour filter, and top and bottom LEDs with adjustable brightness, you can easily look at a strand of hair under 60x/120x/200x magnification. Use your Smartphone on the Smartphone adaptor to capture your experiments. Comes with blank slides, blank labels, cover glasses, collecting vials and tweezers to get you started!

- 360° rotatable eyepiece
- Wide-angle eyepiece
- Top and bottom LED light source with adjustable brightness
- Universal Smartphone adaptor included
- Two light sources for both transparent and non-transparent slides
- Built-in selectable colour filter for contrast enhancement
- Quick and precise focusing mechanism

Smartphone not included

Specifications	QC-3754
Magnification	60x, 120x, 200x
Power	Requires 3 x AAA batteries
Dimensions	240(H) x 130(L) x 130(W)mm



NEW
2015



	Cat.	Qty 1+	Qty 3+	Qty 6+
60x, 120x, 200x	QC-3754	\$99.95	\$89.95	\$79.95

2MP USB DIGITAL MICROSCOPE WITH 200X ZOOM

An essential tool for technicians, jewellers, or hobby use. Plug this microscope into a computer then you magnify objects up to 200x for viewing on the screen. Video and images can be captured and saved onto your computer for later referral. Features 6 bright white LEDs to help with illumination. For finding that bent pin on a motherboard, or for simply studying the microscopic world of nature this an excellent product for practical and fun applications.

Specifications	QC-3197
Image Sensor	2.0MP
Video Capture Resolution	640x480
Image Capture Resolution	1600x1200, 1280x1024, 640x480, 320x240
Colour	24-bit RGB
Lens	Dual Axis 50x & 200x Microscope
Focus Range	Manual focus from 10mm onwards
Frame range	Max 30fps
Magnification Ratio	50x to 200x
Video Format	AVI
White Balance	Auto
Exposure	Auto
Light Source	6 x White LEDs with control wheel
Interface	USB 2.0
Compatibility	Windows 8.1, 8, 7, Vista, XP, 2000
Microscope Dimensions	117(L) x 33(Dia.)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
50x, 200x	QC-3197	\$79.95	\$71.95	\$63.95

5MP USB 2.0 DIGITAL MICROSCOPE WITH PROFESSIONAL STAND

A USB microscope with a simple but incredibly useful stand that allows you to make fine adjustments to the vertical height of the microscope and swivel the scope arm around a 360 degree range. This permits a greater level of viewing accuracy and stability. The microscope can be easily removed from the stand for situations which demand it. On either side of the stand there are two metal holders to lock your object in place and a printed ruler to help you get an approximate feel for the length of objects. The optics built into this microscope are excellent. The sharpness of texture on magnified objects is incredible to look at you will spend hours searching for things to magnify (check out a full resolution 5MP capture on our website).

It comes with a great piece of software for capturing 5MP (2592x1944) res JPGs, BMPs, TIFs or PNGs and 1280x960 pixel AVI files using.

Excellent for educational purposes or a myriad of practical applications such as technicians, jewellers, laboratory work, and much more.

Specifications	QC-3199
Image sensor	5MP
Focus range	Manual focus from 10mm to 150mm
Snap shot	Button or software
Shutter speed	1 sec to 1/1000 sec
Still image resolution	2592x1944, 2048x1536, 1600x1200, 1280x960 pixels
Video capture resolution	1280x960
Flicker control	50Hz/60Hz
Light source	8 x LEDs with adjustable brightness
Magnification ratio	10x, 300x (at 5MP res)
Power source	USB
Compatible with	WinXP/Vista/7/8, Mac 10.6-10.8
Bundled software	Microcapture Pro with measurement function
Dimensions	Microscope: 110(L) x 33(Dia.)mm, Stand: 165(H) x 165(L) x 118(W)mm



VIDEO



	Cat.	Qty 1+	Qty 4+	Qty 10+
10x, 300x	QC-3199	\$169.00	\$151.95	\$134.95

WI-FI DIGITAL MICROSCOPE WITH PROFESSIONAL STAND

Observe the microscopic world and capture images, video, or even time lapse video of this strange and interesting realm. This digital microscope can zoom up to 200x enabling intricate views of any object placed underneath it. An adjustable array of 8 LEDs circles the lens to keep subjects well lit while zoom is controlled by rotating the rubber grip lined shaft. Comes with a professional stand which allows a high level of control and stability for viewing subjects. The stand is particularly useful for taking time lapse videos, keeping the microscope steady as bacterial growth is filmed. Two side clips will hold your specimen in place.

It is great to use with Tablets or Smartphones as it allows greater mobility. As long there's a USB power source (just use an iPhone® plugpack) nearby. Battery can last approximately 2 hours between charges.

Overall, a fantastic way to introduce school age students (or adults!) to the world lurking beneath. This can be also used for many practical applications as well including fault finding on circuit boards, Smartphone repair, or by technicians in many fields.

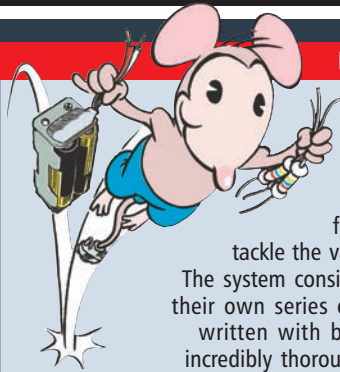
Specifications	QC-3752
Interface	Wi-Fi (802.11b/g/n), up to 10m
Video capture resolution	1280x960, 1024x768, 640x480
Image capture resolution	1280x960, 1024x768, 640x480
Frame range	Max 30fps
Magnification ratio	50x to 200x
Video format	M4V
White balance	Auto
Exposure	Auto
Light source	8 x LEDs with adjustable brightness
Operating system	Windows XP/Vista/7
Microscope dimensions	142(L) x 38(Dia.)mm



Wi Fi
Enabled



	Cat.	Qty 1+	Qty 4+	Qty 10+
50x, 200x	QC-3752	\$299.00	\$269.00	\$239.00



LEARNING ELECTRONICS IS FUN!!!

SHORT CIRCUITS - WHAT IT'S ALL ABOUT...

Since its inception, the Short Circuits learning system has become the preferred platform from which students can confidently tackle the various levels of modern electronics. The system consists of the Short Circuits books and their own series of construction projects. Although written with beginners in mind, the books are incredibly thorough without being intimidating and most importantly, they're written with an emphasis on FUN! All books in the series are geared towards specific levels of electronics knowledge.

Short Circuits Vol 1 acts as an introduction to electronics, absolutely NO previous knowledge of electronics is needed! Short Circuits Vol 2 assumes the reader/constructor has knowledge up to the end of Short Circuits Vol 1. It contains over 20 exciting projects and introduces the novice to soldering etc. Short Circuits Vol 3 extends the concept. After completing Volume 3, there would be no reason why the constructor

couldn't tackle virtually any construction project they desire! All books are lavishly illustrated and collectively boast over 70 exciting projects; each project logically follows from the previous one so while having enormous fun for the constructors knowledge is steadily progressing without mysterious gaps.

The operation of each project is fully described, along with full descriptions of the components you will encounter along the way. To maximise the fun and acquisition of learning, constructors are also shown how to modify and experiment with component changes and how they will change the performance of the project. Explanations of all technical terms are given in plain English - the books are a great read themselves.



SHORT CIRCUITS VOLUME 1 SECOND EDITION



Our first book in the series uses a learning system designed around a baseboard, which you use to mount their projects. All components are connected together by our exclusive spring terminals. They are extremely easy to use, and don't even require a screwdriver.

At the back of the book is a paper template for each project, which attach to the baseboard. The springs are then inserted into the baseboard according to the locations shown on the template. The template then shows EXACTLY where each component goes, making project success almost a certainty.

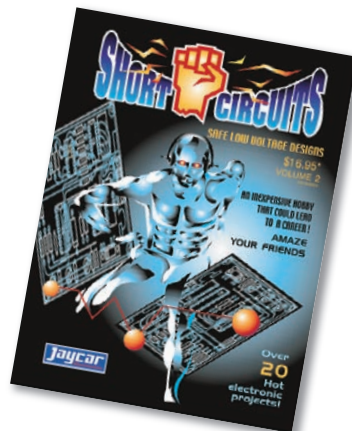
The projects are fun to build and, more importantly, are very relevant to today's electronics. Each of the 20+ projects is powered from batteries and requires absolutely no soldering, making this learning system safe for ages 8+.

- Soft cover - 96 pages
- 205 x 275mm



↑	Qty 1+
Cat. BJ-8502	\$9.95

SHORT CIRCUITS VOLUME 2



Once constructors have the basic skills and knowledge either from a School Design and Technology course, or tackling Short Circuits Vol 1, you can now have some real fun! With this book (and associated project packs available separately - see following pages) they can make such things as a mini strobe light, police siren, mini organ, a couple of powerful radio transmitters, an FM radio - even a 'Knight Rider' scanner!!

All components are fully described and explained, along with tutorials on soldering iron and multimeter use. All projects are safe and battery powered.

- Soft cover - full colour 148 pages
- 205 x 275mm



↑	Qty 1+
Cat. BJ-8504	\$12.95

Short Circuits by



SHORT CIRCUITS VOLUME 3 SECOND EDITION



This is the definitive electronics training manual and is far more than the weekend "fun-type", superficial approach to electronics. This volume presents more than 30 individual printed circuit board-based construction projects.

Naturally, soldering techniques are discussed in detail, as is the proper use of a digital multimeter. We describe projects that take from just 20 minutes to make (such as project 2, Ding Dong Doorbell), to a fully fledged Guitar Sustain which may take several hours to complete, but will give constructors an accessory that can last a lifetime.

Each project contains a full technical description, with experimental changes to each circuit also explained. After constructors have built any or all of the described projects, there is no reason why they would not be able to successfully tackle any of the construction projects published in the electronics magazines. This book will end up giving them the knowledge and skill that will elevate them into a fully fledged constructor!

- Softcover - full colour 128 pages
- 205 x 275mm

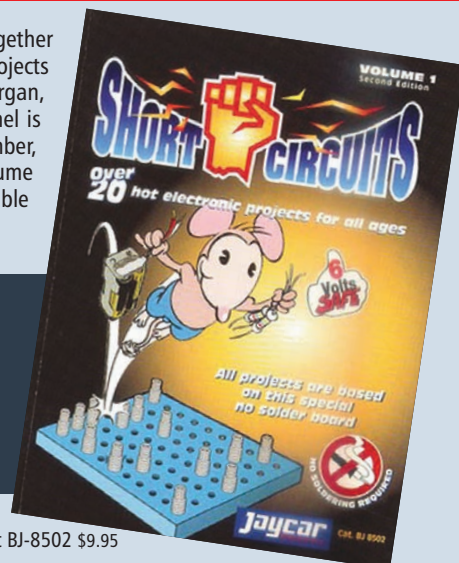


↑	Qty 1+
Cat. BJ-8505	\$14.95

SHORT CIRCUITS VOLUME 1 - SECOND EDITION

With Short Circuits Volume 1, we give the option of buying the book on its own, or together with the accompanying kit that contains the components for each of the 20-odd projects described in the book. Some of the exciting projects include a Police Siren, Electronic Organ, Sound Effects Unit, Light Chaser and a Solar Powered Radio (an inexpensive solar panel is optional and available separately). Of course, many more projects are included! Remember, no prior knowledge of electronics is needed and the projects are totally safe. This volume will teach constructors everything they need to get started in electronics and is suitable for ages 8+. Kits contain small parts.

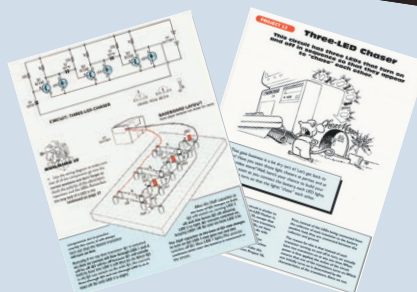
- Circuit diagrams included for each project
- Safe 6 volt system
- Techtalk discusses circuit operation and is written in a clear, easy to understand language
- Component layout on the special breadboard is clearly illustrated for each project
- Fun characters introduce each project, explaining the projects use



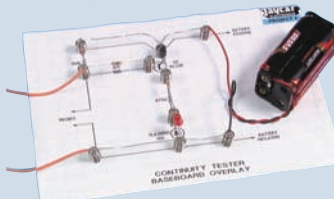
• Book Cat BJ-8502 \$9.95

SOME OF THE EXCITING PROJECTS THAT YOU CAN BUILD FROM THIS BOOK INCLUDE:

- SHORT CIRCUIT TESTER
- MAGIC EYE LIGHT ALARM
- POLICE SIREN
- ELECTRONIC ORGAN
- SOUND EFFECTS UNIT
- LIGHT CHASER
- SOLAR POWERED RADIO
- 3 TYPES OF TRANSISTOR AMPS
- COMPUTER TYPE CIRCUITS
- AND MANY MANY MORE



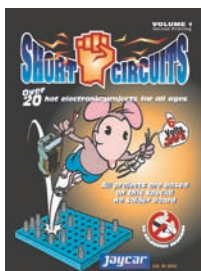
NO PRIOR KNOWLEDGE OF ELECTRONICS NEEDED



SHORT CIRCUITS BOOK

This full colour 96 page book, which measures 205mm x 275mm is lavishly illustrated with over 100 drawings and diagrams. Each project features components which are "state of the art". The projects are fun to build but perhaps more importantly, are relevant to the electronics scene in the new millennium. It is a great read in itself and far superior to cheap alternatives.

SECOND EDITION

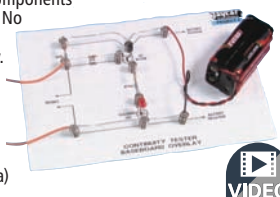


↑	Qty 1 +
Cat. BJ-8502	\$9.95

SHORT CIRCUITS PROJECT

The complete kit of parts available separately. This includes plastic baseboard, spring connectors and all components needed to complete every project in the book. No instructions are supplied with this kit as they come in the book which is available separately.

- Additional Hookup wire can be purchased (WH-3025)
- Optional Solar Cell Power Supply for project #16 is extra Cat ZM-9020 (batteries are also extra)
- 6VDC (4 X AA)

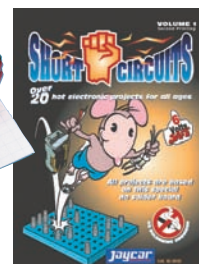
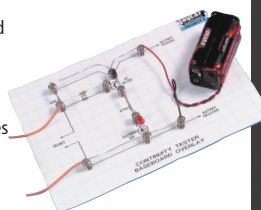


↑	Qty 1 +	Qty 3 +
Cat. KJ-8504	\$33.95	\$30.45

SHORT CIRCUITS BOOK & PROJECT

Apart from the book, we supply the baseboard, plenty of spring terminals and ALL the components required to build every project in the book, INCLUDING the bonus projects!

- Additional Hookup wire can be purchased (WH-3025)
- Optional Solar Cell Power Supply for project #16 is extra Cat ZM-9020 (batteries are also extra)
- 6VDC (4 X AA)



↑	Qty 1 +	Qty 3 +
Cat. KJ-8502	\$39.95	\$35.90



REVIEWED IN ELECTRONICS AUSTRALIA MAY 2000

"It's all very well done, and I'm not surprised that the Short Circuits book and matching kit of parts have proved very popular with schools and colleges, as well as beginning hobbyists. Together they provide an excellent way for newcomers to 'dip their toes' into the wonders of electronics, in an enjoyable and hassle-free way, and of course it has all been designed and published right here in Australia - a credit to all concerned."

SHORT CIRCUITS VOLUME 2

Once constructors have mastered the art of assembling a circuit with springs they will want to tackle projects that are more complex. The benefit of spring termination falls away once they get into projects that have over, say, 20 parts. In addition to this, projects that work on radio frequency, or RF for short, don't like springs as they start to act like little antennae all over the place! So it's time to graduate to the heart of modern electronics - the printed circuit board. This simple device fulfils the function of mounting board & circuit wiring in one. The critical element of success in printed circuit board - or PCB for short - assembly is good soldering. Soldering is not for 8 year olds but its fine if they are older or are under adult supervision. In Short Circuits II we teach the reader how to solder. We teach you a lot more as well:

A SUITABLE 9V BATTERY FOR ALL PROJECTS IS OUR SB-2423 ON PAGE 323

- How to use a Multimeter**
- What tools will be needed.
- What sort of workspace is needed.
- How the circuit works (Tech talk).
- What to do next.
- Making the circuit work in the real world.

SHORT CIRCUITS IS A LEARNING SYSTEM

A key part of the Short Circuits learning system is that the mind is stimulated into learning electronics by building exciting projects and HAVING FUN AT THE SAME TIME. Constructors will get a real "buzz" from the exciting projects offered - 22 in all. These projects have useful functions in the "real world" and they may choose to keep them for a long time because they are so useful. For example, constructors can make a Bionic Ear amplifier for a grandparent. Listed below are the projects in the book. They have all been designed by professional engineers and tested to work reliably. Maybe one day the constructor will be an engineer, designing projects for other people.

- Full colour - 148 pages
- 205 x 275mm



Cat. BJ-8504 \$12.95

DUE TO AUTHOR'S COPYRIGHT, INSTRUCTIONS FOR EACH PROJECT ARE NOT INCLUDED IN THE COMPONENT PACK. CONSTRUCTORS CAN PURCHASE THE BOOK, OR BUY A SET OF INSTRUCTIONS FOR EACH PROJECT SEPARATELY.

TYPICAL TOOLS YOU WILL NEED

LOW COST DMM

- 19 Range
- 2000 Count
- Transistor test
- Diode Test
- 10A DC current
- Ideal first meter
- Compact size

PERFECT FIRST METER
This is a full featured meter with plug-in 4mm probes AND transistor tester. This is the ideal first multimeter, and will give years of faithful service, in fact, you will only need to replace this meter if you require a unit with very high input impedance.

SEE PAGE 148 FOR SPECIFICATIONS



TECH TALK!

****A Multimeter is just that. It enables you to measure all sorts of electrical units, volts, amps, ohms etc. They are the most useful piece of test equipment you will own and base models are not expensive.**

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	QM-1500	\$9.95	\$8.75	\$7.75

MY FIRST SOLDERING IRON

At last you can have your own soldering iron with minimal adult supervision (min 12 years+). It includes a full power iron with long-life tip, a spare tip, stand for the iron (when it's hot), metal solder removal sucker and a generous portion of 1mm solder wire in a handy dispenser tube.

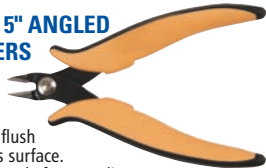
This set will become your best friend in the world of electronics!



↑	Starter Kit	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
		TS-1651	\$24.95	\$22.35	\$19.70

PRECISION 5" ANGLED SIDE CUTTERS

Ideal for fine PCB work. They will easily cut leads flush with the board's surface. The cutters are made from quality tool steel and have soft padded spring loaded handles.



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	TH-1897	\$11.95	\$10.70	\$9.50

PRECISION 6" LONG NOSE PLIERS

With serrated jaws and are made from quality tool steel and have soft padded spring loaded handles.



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	TH-1887	\$11.95	\$10.70	\$9.50

6 PIECE INSULATED ELECTRONIC SCREWDRIVER SET

Ergonomic handles with excellent non-slip grips. The shafts are fully insulated and rated for 1000V. Contains smaller sizes you need for working on electronic gear. Storage case included.

- Slotted: 2mm, 2.5mm, 3mm
- Phillips: #00, #0, #1
- 1000V rated
- TUV and GS approved
- Case: 192(L) x 130(W) x 26(H)mm



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	TD-2026	\$19.95	\$17.70	\$15.70

SHORT CIRCUITS 2 (CONTINUED)

SC2 PROJECT - RED/GREEN FLASHER

Here's a simple and easy-to-build first project. It flashes two LEDs (light emitting diodes) - one red and the other green - alternately, a bit like the light on a police car. A great way to learn how a 555 Timer IC works.

- PCB & all parts supplied
- Requires 9V battery
- Instructions NOT included.
- See KJ-8201 for individual instructions or full colour project book BJ-8504.
- PCB: 43 x 30mm



PROJECT
Number 1

↑	Qty 1+	Qty 3+
Cat. KJ-8200	\$7.95	\$6.95
Instructions KJ-8201	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC2 PROJECT - TOUCH SWITCH

This project allows you to turn things on or off simply by touching a small sensor pad with your finger. This could include operating an alarm, water pump, hi-fi speakers, or any other low voltage gadget.

- PCBs & all parts including the relay supplied
- Requires 9V battery
- Instructions NOT included.
- See KJ-8209 for individual instructions or full colour project book BJ-8504.
- PCB: 75 x 26mm



PROJECT
Number 5

↑	Qty 1+	Qty 3+
Cat. KJ-8208	\$14.95	\$13.35
Instructions KJ-8209	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 PROJECT - NO BRAINER AMPLIFIER

This amp is so easy to build, it's a no brainer! It will, however, give a powerful output to bring your MP3 player or sound card alive! Speaker supplied. Two required for stereo. PCB and all relevant parts included.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8217 for individual instructions or full colour project book BJ-8504.
- PCB: 64 x 57mm



PROJECT
Number 9

↑	Qty 1+	Qty 3+
Cat. KJ-8216	\$14.95	\$13.35
Instructions KJ-8217	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 PROJECT - COUNTDOWN TIMER

This neat project enables you to dial a time you want to elapse before you want something to happen, say the exposure of a camera shutter or an electrically operated door to stay open. At the end of the timed period (seconds to many minutes) a relay is energized which can switch something on or off. PCB and all parts supplied, including relay.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8203 for individual instructions or full colour project book BJ-8504.
- PCB: 61 x 47mm



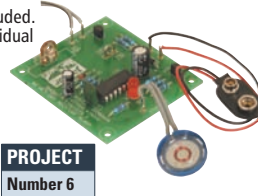
PROJECT
Number 2

↑	Qty 1+	Qty 3+
Cat. KJ-8202	\$14.95	\$13.35
Instructions KJ-8203	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC2 PROJECT - DROUGHT ALARM

Well, not really a big drought. This will test the soil moisture of a favourite pot plant and an alarm will sound if the soil gets too dry.

- Instructions NOT included.
- See KJ-8211 for individual instructions or full colour project book BJ-8504
- PCB, speaker & components
- Requires 9V battery
- PCB: 63 x 57mm



PROJECT
Number 6

↑	Qty 1+	Qty 3+
Cat. KJ-8210	\$14.95	\$13.35
Instructions KJ-8211	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 PROJECT - BEAM ME UP SCOTTY SIMPLE INTERCOM

This project enables you to talk (i.e. not shout) between parts of a house, or a house and a garage. You can even leave it on, say in the kitchen to monitor a baby's room. All parts supplied including PCB and 6-metres of connecting wire. Requires 9V battery.

- Instructions NOT included.
- See KJ-8219 for individual instructions or full colour project book BJ-8504.
- PCB: 63 x 57mm



PROJECT
Number 10

↑	Qty 1+	Qty 3+
Cat. KJ-8218	\$23.95	\$21.35
Instructions KJ-8219	\$2.50	
RECOMMEND BOX UB3 X 2	Cat. HB-6013	\$3.95 ea

SC2 PROJECT - HEE-HAW SIREN WITH FLASHING LIGHT

This project will make the noise made by emergency vehicles when they are trying to get through traffic. PCB and all parts supplied including flashing LED.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8205 for individual instructions or full colour project book BJ-8504.
- PCB: 57 x 51mm



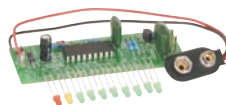
PROJECT
Number 3

↑	Qty 1+	Qty 3+
Cat. KJ-8204	\$9.95	\$8.75
Instructions KJ-8205	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC2 PROJECT - AUDIO LEVEL DISPLAY

Make your own fancy volume level display you see on DJ mixing desks where the columns of light dance up and down with the music. Connect it to the output of your CD, tape player or radio. Build two of them for displays on your stereo hi-fi system.

- PCB and all parts supplied
- Requires 9V battery (not included)
- Instructions NOT included.
- See KJ-8213 for individual instructions or full colour project book BJ-8504.
- PCB: 75 x 26mm



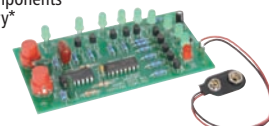
PROJECT
Number 7

↑	Qty 1+	Qty 3+
Cat. KJ-8212	\$14.95	\$13.35
Instructions KJ-8213	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC2 PROJECT - SKEET SHOOT GAME

Here's a fun way to test your hand-eye coordination. The game sends a burst-of-light 'skeet' up along a string of ten LEDs, and you have to try to 'hit' it by pressing the FIRE button at exactly the same time as it reaches the red LED at the end.

- Instructions NOT included.
- See KJ-8211 for individual instructions or full colour project book BJ-8504
- PCB, LEDs and components
- Requires 9V battery*
- PCB: 57 x 107mm



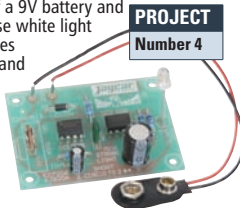
PROJECT
Number 11

↑	Qty 1+	Qty 3+
Cat. KJ-8220	\$17.95	\$15.95
Instructions KJ-8221	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 PROJECT - MINI STROBE LIGHT

No, this unit won't fill a disco with blinding white light. Those things are dangerous and run straight off 240V. This one runs off a 9V battery and gives a surprisingly intense white light especially in darkness. Uses state-of-the-art LED. PCB and parts including LED supplied.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8207 for individual instructions or full colour project book BJ-8504.
- PCB: 61 x 45mm



PROJECT
Number 4

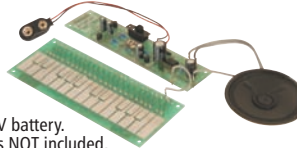
↑	Qty 1+	Qty 3+
Cat. KJ-8206	\$18.95	\$16.95
Instructions KJ-8207	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC2 PROJECT - ELECTRONIC ORGAN

You can play simple tunes easily once you have built this project! The organ keyboard is actually part of the printed circuit board. It even has vibrato for extra realism.

Includes PCB and all board components.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8215 for individual instructions or full colour project book BJ-8504.
- PCBs: 133 x 31mm, 133 x 51mm



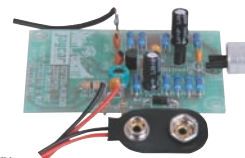
PROJECT
Number 8

↑	Qty 1+	Qty 3+
Cat. KJ-8214	\$22.95	\$20.35
Instructions KJ-8215	\$2.50	
RECOMMENDED BOX - UB1	Cat. HB-6011	\$4.45 ea

SC2 PROJECT - SIMPLE FM BUG

Small portable FM microphone. Works surprisingly well. Use it as a baby minder/monitor as well. PCB and all parts supplied.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8231 for individual instructions or full colour project book BJ-8504.
- PCB: 59 x 41mm



PROJECT
Number 12

↑	Qty 1+	Qty 3+
Cat. KJ-8230	\$14.95	\$13.35
Instructions KJ-8231	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SHORT CIRCUITS 2 (CONTINUED)

SC2 PROJECT - METRONOME

This neat little metronome does everything that a traditional metronome does. It produces an adjustable 'tick' sound to help you play your music at just the right tempo. It also flashes a LED once per bar, to help you get the music's rhythm right as well.

- PCB, speaker and all parts supplied including knobs.
- Requires 9V battery
- Instructions NOT included.
- See KJ-8233 for individual instructions or full colour project book BJ-8504.
- PCB: 82 x 82mm

↑	Qty 1+	Qty 3+
Cat. KJ-8232	\$18.95	\$16.95
Instructions KJ-8233	\$2.50	
RECOMMENDED BOX - UB1	Cat. HB-6011	\$4.45 ea

SC2 PROJECT - JIMINY! WHAT'S THAT CRICKET NOISE?

This fun project makes the distinct sound of a cricket when triggered by a hidden microphone. Someone walks into a room, says something and the next thing this loud cricket starts to chirp! Hours of fun. PCB and all other parts including microphone supplied.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8225 for individual instructions or full colour project book BJ-8504.
- PCB: 61 x 45mm

↑	Qty 1+	Qty 3+
Cat. KJ-8224	\$14.95	\$13.35
Instructions KJ-8225	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 PROJECT - BIONIC EAR

This project enables you to listen to a conversation (or a bird in a tree, etc) beyond what you would normally hear. It uses the principle of a directional microphone. PCB and parts supplied. A plastic bowl or similar is required for the reflector.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8227 for individual instructions or full colour project book BJ-8504.
- PCB: 63 x 57mm

↑	Qty 1+	Qty 3+
Cat. KJ-8226	\$17.95	\$15.95
Instructions KJ-8227	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC2 PROJECT - CASINO! ELECTRONIC DICE

Well dice is really plural and this is just one dice a die. At the press of a button roll 6 light emitting diodes flash briefly and only one stays lit, representing a number between 1 and 6. Truly, truly random and never rolls off the table! PCB and all parts supplied.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8223 for individual instructions or full colour project book BJ-8504.
- PCB: 108 x 51mm

↑	Qty 1+	Qty 3+
Cat. KJ-8222	\$14.95	\$13.35
Instructions KJ-8223	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

PROJECT Number 13



SC2 PROJECT - SOUND LIKE A DALEK

This project will change your voice into that metallic sounding robot voice so familiar in the space adventure movies. PCB and parts supplied. Connect it to the no brainer amp and get really scary!

- Requires 9V battery
- Instructions NOT included.
- See KJ-8229 for individual instructions or full colour project book BJ-8504.
- PCB: 102 x 57mm

↑	Qty 1+	Qty 3+
Cat. KJ-8228	\$23.95	\$21.35
Instructions KJ-8229	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

PROJECT Number 17



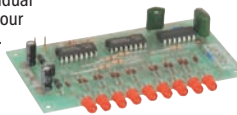
SC2 PROJECT - KNIGHT RIDER LIGHT SCANNER

Now you can make the light scanner that goes on the bonnet of that famous car. Looks fantastic in all sorts of places! PCB and all parts supplied.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8237 for individual instructions or full colour project book BJ-8504.
- PCB: 102 x 55mm

↑	Qty 1+	Qty 3+
Cat. KJ-8236	\$19.95	\$17.70
Instructions KJ-8237	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

PROJECT Number 18



SC2 PROJECT - EVENT COUNTER - 0 TO 999

This project demonstrates how 3-digit counters work and can be used for real-world counting jobs, like counting laps on a slot car set, etc. An excellent 'hands on' introduction to electronics.

- PCB and all parts supplied
- Requires 9V battery
- Instructions NOT included.
- See KJ-8235 for instructions or full colour project book BJ-8504.
- PCB: 127 x 76mm

↑	Qty 1+	Qty 3+
Cat. KJ-8234	\$23.95	\$21.35
Instructions KJ-8235	\$2.50	
RECOMMENDED BOX - UB1	Cat. HB-6011	\$4.45 ea

PROJECT Number 20



SC2 PROJECT - FM RADIO WITH ELECTRONIC TUNING

This is a true state-of-the-art 88-108MHz FM radio with electronic station tuning and powerful amplifier included! It has a voltage regulated power supply and works really well. Your friends won't believe you built it. PCB and all board parts supplied.

- Requires 9V battery.
- Instructions NOT included.
- See KJ-8239 for individual instructions or full colour project book BJ-8504.
- PCB: 108 x 51mm

↑	Qty 1+	Qty 3+
Cat. KJ-8238	\$34.95	\$31.45
Instructions KJ-8239	\$2.50	
RECOMMENDED BOX	Cat. HB-6032	\$7.95 ea

PROJECT Number 21



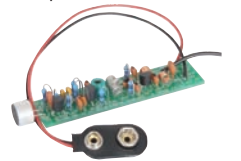
SC2 PROJECT - THREE STAGE FM TRANSMITTER

So stable it could be used as a small radio station. The audience will be limited to the backyard as there are rules about such things. A microphone is included.

- PCB: 70 x 17mm

Instructions included in kit.

PROJECT Number 22



↑	Qty 1+	Qty 3+
Cat. KJ-8750	\$23.95	\$21.35
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

DUE TO AUTHOR'S COPYRIGHT, INSTRUCTIONS FOR EACH PROJECT ARE NOT INCLUDED IN THE COMPONENT PACK. CONSTRUCTORS CAN PURCHASE THE BOOK, OR BUY A SET OF INSTRUCTIONS FOR EACH PROJECT SEPARATELY.

SHORT CIRCUITS - VOLUME II

Once constructors have the basic skills and knowledge either from a School Design and Technology course, or tackling Short Circuits Vol 1, they can now have some real fun! With this book (and associated project packs available separately - see following pages) they can make such things as a mini strobe light, police siren, mini organ, a couple of powerful radio transmitters, an FM radio - even a 'Knight Rider' scanner!

All components are fully described and explained, along with tutorials on soldering iron and multimeter use. All projects are safe and battery powered.

- Soft cover - full colour 148 pages
- Dimensions: 205(W) x 275(H)mm

↑	Qty 1+
Cat. BJ-8504	\$12.95



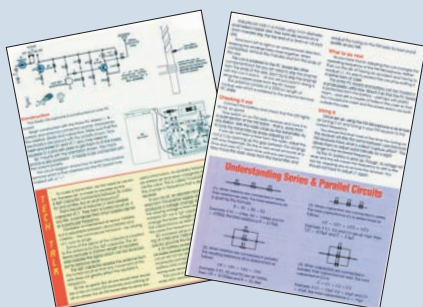
Short Circuits by



SHORT CIRCUITS VOLUME 3 - SECOND EDITION

Like our Volumes 1 & 2 book, Short Circuits Volume 3 is sold independently to each of the 30-odd projects. Some of the projects constructors will build include a Guitar Sustain Unit, a Universal Timer, Car Alarm, Two Lamp Flasher plus many more! There's even a project that demonstrates how constructors can use your computer to interface to the realworld via a computer's parallel port. Building the projects described in Volume 3 will provide constructors with the confidence needed to tackle more complex projects, such as those described in the various electronics hobby magazines.

- Step by step instructions show you how to assemble each project
- Techtalk explains the operation of each circuit in detail, to help constructors gain a thorough knowledge of the "Building Blocks" used in circuit design
- "What To Do Next" shows constructors how to modify or further improve your project
- Basic circuit theory is provided to increase constructors level of understanding



- Book: Cat. BJ-8505, \$14.95
- 128 Pages
- Full Colour
- 205 x 275mm



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FOR EACH PROJECT SEPARATELY.**



SHORT CIRCUITS 3 PROJECTS

SC3 PROJECT - DASHER FLASHER FOR CARS

A really low cost way to deter thieves from breaking into your car. This lamp flasher mounts on your car dashboard and starts flashing when the ignition is off. Looks like the real thing. Kit includes PCB, lamp and all components.

- PCB: 47 x 41mm

**PROJECT
Number 1**

↑	Qty 1+	Qty 3+
Cat. KJ-8050	\$9.95	\$8.75
Instructions KJ-8051	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC3 PROJECT - ELECTRONIC EYE

Install this kit to monitor traffic on a path or through a doorway. When a person or object breaks the beam the loudspeaker will sound. Kit includes PCB, LDR, speaker and all components. 12VDC power required.

- PCB: 105 x 61mm

**PROJECT
Number 3**

↑	Qty 1+	Qty 3+
Cat. KJ-8054	\$14.95	\$13.35
Instructions KJ-8055	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - INFRARED REMOTE LINK

This can be used as a remote on/off or momentary switch.

- Kit includes PCBs, 9V battery and all electronic components.
- Receiver requires 12VDC power.
- PCBs: 105 x 60mm

**PROJECT
Number 5**

↑	Qty 1+	Qty 3+
Cat. KJ-8058	\$28.95	\$25.95
Instructions KJ-8059	\$2.50	
RECOMMEND BOX UB3 X 2	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - DING DONG DOOR BELL

Another useful little kit that generates the sound of a classic Ding Dong door bell. Just the thing for your front door. Kit includes PCB, speaker and all components. 12VDC power required.

- PCB: 105 x 60mm

**PROJECT
Number 2**

↑	Qty 1+	Qty 3+
Cat. KJ-8052	\$12.95	\$11.35
Instructions KJ-8053	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - SIMPLE FM ALARM

Track moving objects, find the dog when it runs away or even recover your stolen goods using an FM radio. This kit transmits a tone over the FM band so that you can track it down using an FM radio. Kit includes PCB, 9V battery and all electronic components. A fun & useful project.

- PCB: 105 x 60mm

**PROJECT
Number 4**

↑	Qty 1+	Qty 3+
Cat. KJ-8056	\$14.95	\$13.35
Instructions KJ-8057	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - SIMPLE INTRUDER ALARM

This simple design features a normally open and normally closed input, 40 second siren duration and triggered LED indication.

- Kit includes PCB, buzzer & electronic components.
- 12VDC power required.
- PCB: 105 x 60mm

**PROJECT
Number 6**

↑	Qty 1+	Qty 3+
Cat. KJ-8060	\$14.95	\$13.35
Instructions KJ-8061	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SHORT CIRCUITS 3 PROJECTS

SC3 PROJECT - SCREAMER CAR ALARM

PROJECT Number 7



A more sophisticated alarm including entry/exit delay, flashing deterrent light, soft warning alarm and deafening internal siren. Thieves will make a hasty retreat!

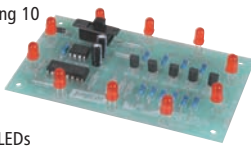
- Kit includes PCB, siren and electronic components.
- PCB: 132 x 88mm

↑	Qty 1+	Qty 3+
Cat. KJ-8062	\$32.95	\$29.45
Instructions KJ-8063	\$2.50	
RECOMMENDED BOX - UB2	Cat. HB-6012	\$6.95 ea

SC3 PROJECT - LIGHT CHASE

Dazzling display using 10 LEDs that appear to chase each other. Build for a shop, theatre or advertising display.

- Kit includes PCB, LEDs and electronic components.
- 12VDC power required.
- PCB: 105 x 60mm



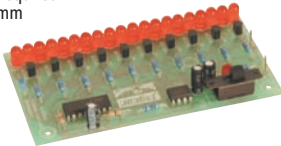
PROJECT Number 8

↑	Qty 1+	Qty 3+
Cat. KJ-8064	\$12.95	\$11.35
Instructions KJ-8065	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - LIGHT SCANNER / CHASER

An impressive display using 20 LEDs that chase forward and backward - just like scanners seen in space movies.

- Kit includes PCB, LEDs & all electronic components.
- 12VDC power required.
- PCB: 105 x 60mm



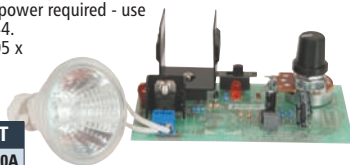
PROJECT Number 9

↑	Qty 1+	Qty 3+
Cat. KJ-8066	\$16.95	\$14.95
Instructions KJ-8067	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - REALLY BRIGHT FLASHER

Attract attention with this bright halogen light flasher. The flash rate can be adjusted between 0.5 to 3.5 seconds.

- Kit includes PCB, 12V halogen lamp with base and all electronic components.
- 12VAC power required - use MP-3044.
- PCB: 105 x 60mm



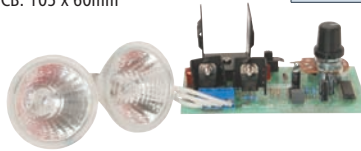
PROJECT Number 10A

↑	Qty 1+	Qty 3+
Cat. KJ-8068	\$24.95	\$22.35
Instructions KJ-8069	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - TWO LAMP FLASHER

Alternate flashing halogen lamps with an adjustable flash rate between 1 to 4 seconds.

- Kit includes PCB, two halogen lamps with bases and all electronic components.
- 12VAC required - use MP-3044
- PCB: 105 x 60mm



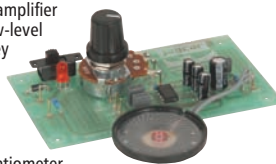
PROJECT Number 10B

↑	Qty 1+	Qty 3+
Cat. KJ-8070	\$29.95	\$26.90
Instructions KJ-8071	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - THE CHAMP AMPLIFIER

A cheap and handy amplifier that can improve low-level signal sources so they can be heard on headphones or a speaker.

- Kit includes PCB, volume potentiometer and all electronic components.
- 12VDC power required.
- PCB: 105 x 60mm



PROJECT Number 11

↑	Qty 1+	Qty 3+
Cat. KJ-8072	\$14.95	\$13.35
Instructions KJ-8073	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - UNIVERSAL STEREO PREAMPLIFIER

If the input signal to your amplifier is not sufficient you will need a preamplifier such as this one to boost the signal.

- Kit includes PCB and all electronic components.
- 12VDC power required.
- PCB: 105 x 60mm



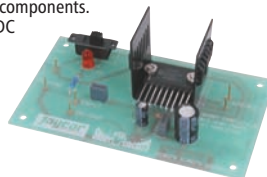
PROJECT Number 12

↑	Qty 1+	Qty 3+
Cat. KJ-8074	\$14.95	\$13.35
Instructions KJ-8075	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - HIGH POWER 12V AMPLIFIER

This amplifier-on-a-chip can deliver about 13.5-watts into a 4-ohm speaker. That's quite loud!

- Kit includes PCB, amplifier IC, heatsink and all electronic components.
- Speaker and 12VDC power required.
- PCB: 105 x 60mm



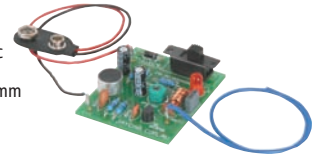
PROJECT Number 13

↑	Qty 1+	Qty 3+
Cat. KJ-8076	\$23.95	\$21.35
Instructions KJ-8077	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - SIMPLE FM MICROPHONE

This FM transmitter has many possible uses including baby room monitor, wireless microphone or spy bug. It can be picked up on any FM radio.

- Kit includes PCB, electret microphone, 9V battery and electronic components.
- PCB: 48 x 42mm



PROJECT Number 14

↑	Qty 1+	Qty 3+
Cat. KJ-8078	\$12.95	\$11.35
Instructions KJ-8079	\$2.50	
RECOMMENDED BOX - UB5	Cat. HB-6015	\$2.95 ea

SC3 PROJECT - MINI-MITTER FM TRANSMITTER

Transmit stereo audio from your tape deck or CD player to any FM radio elsewhere in your house. You could even tune in on a portable walkabout radio.

- Kit supplied with PCB, 1 x AA battery and electronic components.
- PCB: 105 x 60mm



PROJECT Number 15

↑	Qty 1+	Qty 3+
Cat. KJ-8114	\$23.95	\$21.35
Instructions KJ-8115	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - LOW-COST INTERCOM SYSTEM

A low-cost method of communicating between two rooms. The remote unit is hands free so it's also great as a baby monitor.

- Kit includes PCB, speakers and electronic components.
- 12VDC required.
- PCB: 105 x 60mm



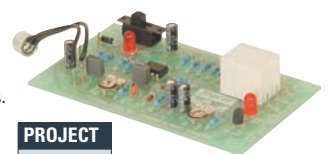
PROJECT Number 16

↑	Qty 1+	Qty 3+
Cat. KJ-8080	\$15.95	\$14.35
Instructions KJ-8081	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - VOX - SOUND SWITCH

This sound-activated switch closes a relay when a loud enough sound is heard. It switches off when the sound stops. Ideal for radio transmitters or surveillance applications.

- Kit includes PCB, relay, electret mic & electronic components.
- 12VDC required.
- PCB: 105 x 60mm



PROJECT Number 18

↑	Qty 1+	Qty 3+
Cat. KJ-8084	\$14.95	\$13.35
Instructions KJ-8085	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SHORT CIRCUITS 3 PROJECTS

SC3 PROJECT - TRAIN SOUND FX

Authentic sounding train whistle and horn sound effects for your model railway.

- Kit includes PCB, speaker and electronic components.
- 12VDC power required.
- PCB: 160 x 103mm



PROJECT
Number 19

↑	Qty 1+	Qty 3+
Cat. KJ-8086	\$27.95	\$24.95
Instructions KJ-8087	\$2.50	
RECOMMENDED BOX - UB2	Cat. HB-6012	\$6.95 ea

SC3 PROJECT - GUITAR DISTORTION UNIT

Distortion is popular to many guitarists. It can make the music sound quite different. Project includes PCB, 6.5mm sockets and electrical components.

- 12VDC power required.
- PCB: 105 x 60mm



PROJECT
Number 27

↑	Qty 1+	Qty 3+
Cat. KJ-8102	\$16.95	\$14.95
Instructions KJ-8103	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - REGULATED +/- 12V POWER SUPPLY

Some applications need a positive and negative supply. This circuit will supply a +12V and -12V rail.

- Kit supplied with PCB, 12V regulators and electronic components.
- Requires plugpack MP-3055
- PCB: 105 x 60mm



PROJECT
Number 28B

↑	Qty 1+	Qty 3+
Cat. KJ-8106	\$14.95	\$13.35
Instructions KJ-8107	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - GUITAR PRACTICE AMPLIFIER

This low cost amplifier allows you to practice your guitar without annoying the neighbours. It has a guitar type input socket, small speaker and volume.



- Kit supplied with PCB, speaker, socket and electronic components.
- 12VDC power required.
- PCB: 105 x 60mm

PROJECT
Number 22

↑	Qty 1+	Qty 3+
Cat. KJ-8092	\$16.95	\$14.95
Instructions KJ-8093	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

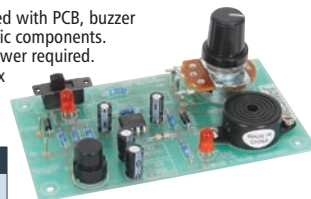
+
DUE TO AUTHOR'S COPYRIGHT, INSTRUCTIONS FOR EACH PROJECT ARE NOT INCLUDED IN THE COMPONENT PACK. CONSTRUCTORS CAN PURCHASE THE BOOK, OR BUY A SET OF INSTRUCTIONS FOR EACH PROJECT SEPARATELY.

*** NOTE: SHORT CIRCUITS 3 KITS DON'T CONTAIN BATTERIES. WE WOULD RATHER SEE CONSTRUCTORS USE A FRESH BATTERY ONCE THE PROJECT IS COMPLETED.**

SC3 PROJECT - UNIVERSAL TIMER

This timer is adjustable between 1-second to 3.5-minutes. An LED illuminates during the timing period and a buzzer sounds at the end.

- Kit supplied with PCB, buzzer & electronic components.
- 12VDC power required.
- PCB: 105 x 60mm



PROJECT
Number 29

↑	Qty 1+	Qty 3+
Cat. KJ-8108	\$16.95	\$14.95
Instructions KJ-8109	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - GUITAR SUSTAIN UNIT

Add this sustain unit to your guitar to make it sound more fulfilling. Features adjustable Decay and Attack.

- Kit supplied with PCB, 6.5mm sockets and electronic components.
- 12VDC power required.
- PCB: 105 x 60mm



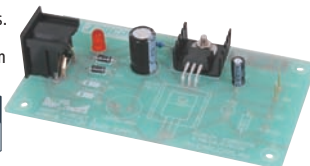
PROJECT
Number 26

↑	Qty 1+	Qty 3+
Cat. KJ-8100	\$23.95	\$21.35
Instructions KJ-8101	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - REGULATED +12V POWER SUPPLY

Many of the Short Circuits 3 projects require 12VDC power. Using our plugpack (MP-3055), this low cost power supply is ideal to power these projects.

- Kit supplied with PCB, 12V regulator and electronic components.
- PCB: 105 x 60mm



PROJECT
Number 28A

↑	Qty 1+	Qty 3+
Cat. KJ-8104	\$12.95	\$11.35
Instructions KJ-8105	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

SC3 PROJECT - WAVEFORM GENERATOR

This low-cost signal generator produces adjustable square and triangular waves between 100Hz-20kHz. Ideal for testing, troubleshooting and developing circuits.

- Kit supplied with PCB and electronic components.
- 12VDC power required.
- PCB: 105 x 60mm



PROJECT
Number 30

↑	Qty 1+	Qty 3+
Cat. KJ-8110	\$16.95	\$14.95
Instructions KJ-8111	\$2.50	
RECOMMENDED BOX - UB3	Cat. HB-6013	\$3.95 ea

LET'S FIND EVERYTHING YOU NEED!

FROM
\$4.45
HB-6011



ENCLOSURES P123

FROM
\$5.95
QM-1502



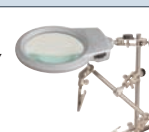
MULTIMETERS P148

FROM
\$24.95
TS-1651



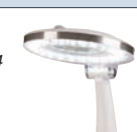
SOLDERING IRON KIT P173

FROM
\$16.95
TH-1987



PCB HOLDER P177

FROM
\$54.95
QM-3544



MAGNIFYING LAMP P144

FROM
\$1.95
SB-2424



BATTERIES P323

FROM
\$19.95
MP-3011



POWER SUPPLIES P334

FROM
\$11.95
TH-1897



CUTTERS P131

FROM
\$0.50 per metre
WB-1702

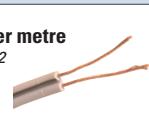


FIGURE 8 CABLE P206

FROM
\$7.95
WH-5525



HEATSHRINK P215

LET'S POINT YOU TO THE RIGHT PAGE...

Electronics Kits & Projects

Even though we have made a massive commitment to Arduino PCB based projects, we are still committed to supporting Silicon Chip projects with kits. For example, we have supported the Mini-D 2 x 10W Class-D Amplifier on page 53, Universal Voltage Switch for Cars on page 56, and the Tempmaster MK3 Electronic Thermostat on page 57.

And finally don't forget if you are looking for the parts for an old project, look up our incredible Back Catalogue of kits.

Its very popular! See further details on page 54

Audio/Video 52

+/- 55V Power Supply	KC-5517	53
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Crazy Cricket & Freaky Frog	KC-5510	54
Crystal Radio	KV-3540	53
Digital to Analogue Converter	KC-5172	53
High-Power Class-D Amp	KC-5514	53
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Improved Low Voltage Regulator	KC-5463	59
LED Battery Voltage Indicator	KA-1778	60
Motor Speed Controller	KC-5502	60
Motor Speed Controller II	KC-5526	60
Soft Start Kit for Power Tools	KC-5511	59
Universal Power Supply MKII	KC-5501	60
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Test Equipment 62

Digital Multimeter Kit	KG-9250	62
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USB Voltage Checker	KC-5522	62

EXPLANATION OF KIT ICONS



SIMPLE

SIMPLE - These kits are straightforward to assemble, generally built in one session and will require some basic electronics knowledge and soldering skills. Most are battery or AC adaptor powered. They may not have enclosures (i.e. "boxes") or front panels.



DETAILED

DETAILED - Similar to the above but basically bigger. They are either "short forms" of larger projects or are fully operational projects with enclosures, front panels, etc. A greater knowledge of electronics is required to understand their operation and "troubleshoot" if necessary.



COMPLEX

COMPLEX - All big projects which by their nature are complex, require several sittings to complete and may require some mechanical assembly. A good knowledge of electronics and manual dexterity is necessary to ensure success.



BATTERY INCLUDED

BATTERY INCLUDED - Batteries are included with the kit.



DANGEROUS 240V

240V POWERED - All mains kits have this logo. We do this because we feel it is necessary that only experienced kit constructors should attempt mains powered projects. It is generally a good idea to have a competent colleague check your work before applying power.



AUTOMOTIVE KIT

AUTOMOTIVE KIT - Kit is specifically designed for automotive (which could mean motorcycle, caravan or boat as well).



15 mins

BUILD TIME - We understand that your time is valuable. We have therefore decided to provide you with an estimated build time for all our kits. Each kit includes a stopwatch logo that clearly indicates construction time. We know that you will find this useful.



Kwik Kit

KWIK KIT - A low cost fast assembly range of kits. Kwik kits are a fully imported range that can be assembled in just one sitting, sometimes only minutes! All printed circuit boards are screened with a component overlay. The instructions assume component knowledge & the ability to follow simple schematic diagrams.



SMD

SMD COMPONENT - Kit involves soldering a SMD (Surface Mount Device). Suitable soldering iron for SMD soldering and proper handling techniques are required.



SMD PRE-SOLDERED

SMD COMPONENT - PRE SOLDERED - Kit supplied with surface mount component already soldered onto the PCB

GUARANTEE ON KITS

Most kits are successfully constructed with few problems. However, we recommend that if a kit builder does not have enough knowledge to diagnose faults, that the project should not be started unless assistance can be obtained. Unfortunately, one small faulty solder joint or wiring mistake can prevent a project from operating, which would take hours to locate and at normal service rates the service charge could well be more than the total cost of the kit. If you believe that you may have difficulty in building a kit (which is

simply a complete set of separate parts made up to a list provided by the major electronics magazines) and you cannot get assistance from a friend, we suggest you return the kit to us in its original condition for a refund under our satisfaction guarantee. Unfortunately, kits cannot be replaced under our satisfaction guarantee once construction has been commenced. However, should you find any faulty parts (only), we will gladly replace them under warranty.

PREAMPLIFIER KITS

"PRE-CHAMP" VERSATILE PREAMPLIFIER

Refer: Silicon Chip Magazine July 1994

This tiny preamp was specifically designed to be used with the 'Champ' amplifier KC-5152. Unless you have a signal of sufficient amplitude the 'Champ' will not produce its maximum power output. The 'Pre-Champ' is the answer with a gain in excess of 40dB, which is more than enough for most applications. You can vary the gain by changing a resistor and there is even provision on the PCB for an electret microphone. Use AM-4010.



- Power requirement 6-12VDC.
- Kit includes PCB and electronic components.
- Can be battery powered.
- PCB: 46 x 36mm

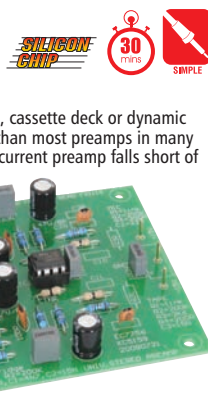
↑	Cat.	Qty 1+	Qty 5+
	KC-5166	\$9.95	\$8.75
ELECTRET MICROPHONE TO SUIT	AM-4010	\$2.35 ea	
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

UNIVERSAL STEREO PREAMPLIFIER

Refer: Silicon Chip Magazine April 1994

Perfect for phono, tape or microphones.

Based around the low noise LM833 dual op-amp IC, this preamp is designed for use with a magnetic cartridge, cassette deck or dynamic microphone. The performance of this design is far better than most preamps in many stereo amplifiers, making it a worthy replacement if your current preamp falls short of expectation. It features RIAA/IEC equalisation, and is supplied with all components to build either the phono, tape or microphone version. Measuring only 80 x 78 x 30mm, it is ideal for incorporating into existing equipment



- PCB and components
- +/- 15VDC
- Use Cat MM-2007 if power is not available in your equipment.
- PCB: 80 x 78mm.

↑	Cat.	Qty 1+	Qty 5+
	KC-5159	\$18.95	\$16.95
TRANSFORMER TO SUIT	MM-2007	\$8.95 ea	
RECOMMENDED BOX - UB1	HB-6011	\$4.45 ea	

AMPLIFIER KITS

"THE CHAMP" AUDIO AMPLIFIER

Refer: Silicon Chip Magazine February 1994

This tiny module uses the LM386 audio IC, and will deliver 0.5W into 8 ohms from a 9 volt supply making it ideal for all those basic audio projects. It features variable gain, will happily run from 4-12VDC and is smaller than a 9 volt battery, allowing it to fit into the tightest of spaces.



- PCB and all electronic components included.
- PCB: 46 x 26mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5152	\$9.95	\$8.75
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

1 WATT AUDIO AMPLIFIER MODULE

This tiny PCB measuring only 28 x 28mm incorporates all the electronics for a 1 Watt amplifier. 4 to 12VDC operating voltage, 50mV input sensitivity, 8 ohm output and 20 to 25000Hz output frequency. Optional connection for a 10k ohm - 100k ohm logarithmic potentiometer (not included) for adjustable volume control.



- PCB and components.
- 9VDC (use MP-3146)
- PCB: 41 x 24mm

↑	Cat.	Qty 1+	Qty 5+
	KG-9032	\$9.95	\$8.75
9VDC PLUGPACK TO SUIT	MP-3146	\$17.95 ea	

50 WATT AMPLIFIER MODULE

Refer: Silicon Chip Magazine March 1994

This 50 watt unit uses a single chip module and provides 50 watts RMS into 8 ohms with very low distortion and extreme quietness. PC Board size only 84 x 58mm.



Power Requirements:

- +/-35VDC rails @ 80VA per module
- MT-2114 25 + 25V 160VA toroid x 1
- ZR-1314 Bridge rectifier x 1
- RE-6241 2,200/50V electro caps x 2
- Kit is supplied in short form version.
- PC Board and electronic components supplied.
- Use heatsink HH-8590.
- PCB: 84 x 58mm

Specifications	
Output power	50WRMS continuous into 8 ohms
Power supply	+/- 37.5VDC
Signal-to-noise ratio	-114dB (A-weighted) -106dB (20-20kHz)
Distortion	0.002% at 40W 1kHz
IHF power output	60W @ 1kHz

↑	Cat.	Qty 1+	Qty 5+
	KC-5150	\$32.95	\$29.45
AMPLIFIER MODULE KIT	MT-2114	\$54.95 ea	
TOROID	ZR-1314	\$2.50 ea	
BRIDGE RECTIFIER	RE-6241	\$3.25 ea	

'THE CHAMPION' AUDIO AMPLIFIER KIT WITH PRE-AMPLIFIER

Refer: Silicon Chip Magazine January 2013

An amplifier and pre-amplifier combination for all those general-purpose audio projects. It uses the AN7511 audio IC to deliver 2W music power into 8 ohms from a 9 to 12V supply. Features low distortion, two inputs (mixed 1:1), over-temperature protection (auto-limiting), Mute and standby control. Pre-amplifier is also suitable for microphones and electric guitars, and can be separated from the amplifier for individual use. Kit supplied with silk-screened PCB, heatsink and PCB mount components.



Note: Optional 10kohm potentiometer for external volume control use RP-7610

Specifications	
Operating voltage range	4 - 13.5VDC
Output power	up to 4W
Music power	3W @ 9 - 12V
Signal-to-noise ratio:	65dB
Frequency Response	-2.5dB @ 20Hz, -0.2dB @ 20kHz
THD+N, 1kHz: 0.25%	
Gain	34dB for Amplifier, up to 58dB with pre-amplifier
Input Sensitivity for Amp only:	52mV RMS @ 5V, 125mV RMS @ 9 - 12V
Input Sensitivity for Amp & Pre-amp	2mV RMS @ 5V, 5mV RMS @ 9 - 12V
Quiescent current:	2mA (Pre-amplifier) + 30-60mA (Amplifier)
Standby current	2mA (Pre-amplifier) + 1-10uA (Amplifier)
PCB	101x41mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5519	\$22.95	\$20.35

KIT BACK CATALOGUE - AUDIO KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see page 54 or 62.

Description	Magazine	Issue	Cat.	1+
115WRMS/8Ω, 175WRMS Power Amp Module	SC	04/96	KC-5201	\$95.95
Bass Blazer Baragrp Display	SC	02/01	KC-5305	\$49.95
CD Audio Compressor Kit	SC	06/00	KC-5291	\$83.95
CDROM Controller for Audio Playback	SC	12/07	KC-5459	\$64.95
DAB+/FM Digital Radio	SC	08/10	KC-5491	\$399.00
Digital Audio Delay	SC	12/11	KC-5506	\$99.95
Guitar Mixer 4 Channel 12VDC	SC	06/07	KC-5448	\$99.00
Power Amp Module 115W RMS/8 Ohm / 175WRMS/4 Ohm	SC	04/96	KC-5201	\$95.95
Power Supply to suit 135W Distortion MkII Amplifier	SC	09/08	KC-5471	\$29.95

Description	Magazine	Issue	Cat.	1+
Power Supply to suit SC-480	SC	01/03	KC-5347	\$17.95
SC-480 50W Mono Amplifier Module V1 TO-218	SC	01/03	KC-5345	\$49.95
Stereo Compressor	SC	01/12	KC-5507	\$59.95
Stereo Headphone Distribution Amplifier Kit	SC	11/05	KC-5417	\$34.95
Studio 350 - High Power Amplifier	SC	01/04	KC-5372	\$175.00
Subwoofer Controller	SC	08/07	KC-5452	\$99.95
Theremin Synthesiser Kit	SC	08/00	KC-5295	\$59.95
Theremin Synthesiser - Midi	SC	04/05	KC-5410	\$159.00
Universal Speaker Protection & Muting Module	SC	07/07	KC-5450	\$34.95

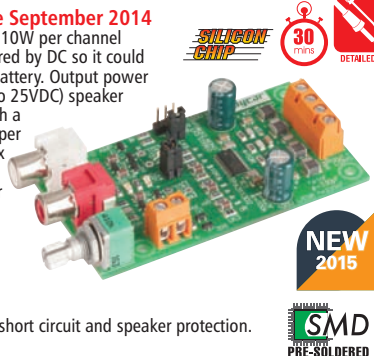
AMPLIFIER KITS (CONTINUED)

MINI-D 2 X 10W CLASS-D AMPLIFIER KIT

Refer: **Silicon Chip Magazine September 2014**

This compact amplifier can deliver 10W per channel stereo or 30W mono, and is powered by DC so it could be used for busking running of a battery. Output power depends on operating voltage (8 to 25VDC) speaker impedance (4 to 8 Ohm) used. With a 12VDC supply it can deliver 7.5W per channel into 8-ohm speakers or 2 x 15W into 4-ohm loads. Being highly efficient there is no need for a heatsink!

- Up to 91% efficient
- Selectable gain
- On-board volume control
- Low-power shutdown mode
- Over-temperature, over-current, short circuit and speaker protection.
- PCB: 85 x 46mm



NEW
2015

SMD
PRE-SOLDERED

Supplied with double sided, solder-masked and screen-printed PCB, and ALL SMD components pre-soldered to the PCB to save you the hassle of soldering them yourself.

↑	Cat.	Qty 1+	Qty 5+
	KC-5530	\$49.95	\$44.90

HIGH-POWER CLASS-D AUDIO AMPLIFIER KIT

Refer: **Silicon Chip Magazine November & December 2012**

This DIY high performance amplifier boasts 250WRMS output into 4 ohms, 150W into 8 ohms and can be bridged with a second kit for 450W into 8 ohms. Not only does it output high-quality sound, it is also rugged and reliable with all sorts of protection built in. Class-D amplifiers are also far more efficient and generate much less heat than linear Class A, B and AB designs.

- High efficiency
- High power
- Low distortion and noise
- Bridging option for driving 8-ohm load with two modules
- Over-current protection
- Over-temperature protection
- Under-voltage switch-off
- Over-voltage switch-off
- DC offset protection
- Fault indicator
- Amplifier running indicator
- Optional speaker protection module

KC-5514



KC-5517

SMD
PRE-SOLDERED

Specifications	
THD + N	<0.01%
Power output	up to 150W into 8 ohm and 250W into 4 ohm, depending on power supply
Efficiency	Typically 90% at full power for 8 ohm and 83% for 4 ohm
Signal-to-noise ratio	103dB with respect to full power
Input sensitivity	2VRMS (4 ohm), 2.2VRMS (8 ohm)
Frequency response	+/- 1dB, 10Hz - 10kHz
Power requirements	+/- 40 to 60VDC, 50 to 55V nominal (use KC-5517)

Kit supplied with double sided, soldermasked and screen-printed PCB with SMD IC pre-soldered, heatsink, and electronic components.

- PCB dimensions: 117 x 167mm

Note: The surface-mount IC is pre-soldered to avoid frustration

↑	Cat.	Qty 1+	Qty 5+
High-Power Class-D Amplifier	KC-5514	\$89.95	\$80.95
+/- 55V Power Supply	KC-5517	\$29.95	\$26.90

AUDIO KITS

THE SUPER EAR

Refer: **Electronics Australia May 1998**

This kit assists people who have difficulty in hearing high audio frequencies, or for those who want to hear more than their normal unaided ear. By amplifying these high audio frequencies, not only will conversations be made clearer, you will be able to hear noises not normally heard such as insects or a watch ticking, for example. Built into a small case and powered from a 9V battery makes this kit totally portable. Use it as a hearing aid or for a fun & educational purpose.



- Kit supplied with case, machined panel, PCB, 9V battery, and all electronic components.
- Headphones required.
- Note: Not a replacement for a proper hearing aid.
- PCB: 56 x 26mm

↑	Cat.	Qty 1+	Qty 5+
	KA-1809	\$29.95	\$26.90

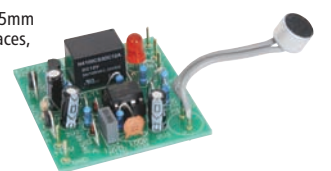
"MINIVOX" VOICE OPERATED RELAY

Refer: **Silicon Chip Magazine September 1994**

Voice operated relays are often used in 'hands free' communication such as mobile radios, amateur transceivers as well as some PA applications. The idea, of course is that instead of pushing a button on the microphone to talk, the sound of the voice activates it instead.

This tiny kit measures approx 50 x 50 x 15mm and is designed to fit into the tightest spaces, has almost no turn-on delay, and has 3 second release time.

- 12VDC @ 35mA required.
- Kit is supplied with PCB electret mic, and all specified components.
- PCB: 47 x 44mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5172	\$16.95	\$14.95
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

AV KITS - RADIO & FM KITS

CRYSTAL RADIO

A radio without batteries!

Enjoy AM broadcasting without using battery or other power sources. Ideal for entry-level students or hobbyist with little electronics experience.

- Includes circuit explanation.
- Kit supplied with screen printed PCB (81x53mm), crystal, pre-wound coil, earphone and all components.
- PCB: 80 x 50mm.



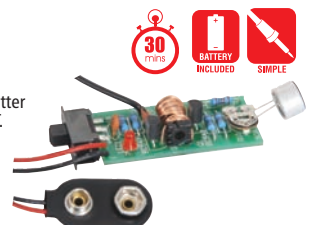
↑	Cat.	Qty 1+	Qty 5+
	KV-3540	\$14.95	\$13.35

MINIATURE FM TRANSMITTER

Refer: **Electronics Today International December 1985**

This unit is a two transistor two stage transmitter that has the benefits of being VERY COMPACT. The kit contains PCB, 9V battery and all components, and makes an ideal inexpensive beginners kit.

- PCB: 45 x 23mm



↑	Cat.	Qty 1+	Qty 5+
	KE-4711	\$12.95	\$11.35
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

KIT BACK CATALOGUE - AV KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

Description	Magazine	Issue	Cat.	1+
Annunciator with 75mm High Digits - 00 to 99	SC	12/05	KC-5420	\$59.95
AV Booster Kit	SC	04/03	KC-5350	\$99.95
AV Distribution Amplifier with 5-Video - Low Cost	SC	11/01	KC-5321	\$139.95

KIT BACK CATALOGUE - RADIO/FM KITS

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see page 54 or 62.

Description	Magazine	Issue	Cat.	1+
Composite AV Distribution Amplifier - Low Cost	SC	11/01	KC-5320	\$139.95
Dr Video Enhancer/Stabiliser MkII	SC	06/04	KC-5390	\$99.95
100-200MHz VHF Converter	Kwik Kit		KG-9128	\$29.95

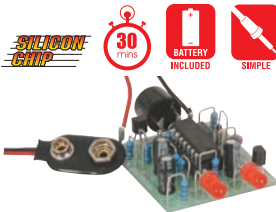
AUDIO EFFECTS KITS

CLIFFORD THE CRICKET

Refer: **Silicon Chip Magazine Dec 1994**

Clifford hides in the dark and chirps annoyingly until a light is turned on - just like a real cricket. Clifford is created on a small PCB and has little LED insect eyes that flash as it sings. Just like a real cricket, it waits a few seconds after darkness until it begins chirping, and stops instantly when a light comes back on.

- PCB, piezo buzzer, LDR plus all electronic components supplied.
- PCB: 41 x 36mm



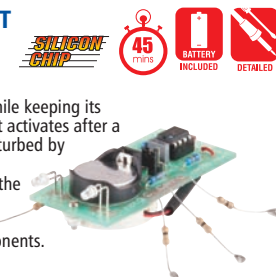
↑	Cat.	Qty 1+	Qty 5+
	KC-5178	\$17.95	\$15.95

CRAZY CRICKET & FREAKY FROG KIT

Refer: **Silicon Chip Magazine June 2012**

A fun first project for a budding electronics enthusiast. Designed to imitate the chirping noise of a cricket or gentle croaking of a frog, while keeping its location secret to annoy other family members. It activates after a short time delay in darkness and stops when disturbed by light. Both the cricket or frog modes are in pre-programmed in the IC. Each time you turn it on, the alternating program runs. Kit supplied with silk screened PCB, pre-programmed PIC IC, CR2032 button cell battery and electronic components.

- PCB dimensions: 30 x 65mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5510	\$22.95	\$20.35

THEREMIN SYNTHESISER MKII

Refer: **Silicon Chip Magazine March 2009**

The ever-popular Therman is better than ever. It's easier to set up with extra test points for volume adjustment and power supply measurement and it now runs on AC to avoid the interference switchmode plugpacks can cause. It's also easier to build with PCB-mounted switches and pots to reduce wiring to just the hand plate, speaker and antenna and has the addition of a skew control to vary the audio tone from distorted to clean.

- Complete kit contains PCB with overlay, pre-machined case and all specified components.
- 12VAC 250mA power required.
- PCB size: 85 x 145mm



CREATE YOUR OWN WEIRD SCIENCE FICTION SOUNDS WITH THIS MODERN IMPLEMENTATION OF AN OLD IDEA.

As used in the Beach Boys classic hit "Good Vibrations" Create your own weird science fiction sounds with this modern implementation of an old idea. The Therman synthesiser produces those familiar science fiction movie sound effects when you move your hand between a metal plate and antenna. The unit has an amazing range from piecing shrieks to low end growling sounds. The Therman, named after its inventor Leon Therman, is a musical instrument that uses electronic circuits to produce audible sounds, having the unusual aspect of being controlled by the player's hand movements near the two "antennas", without touching the instrument.

HOW DOES IT WORK?

As the player moves his hands, the value of capacitance between his hand and the therman's antennas vary, changing current in the circuit, which in turn controls the sound signal that goes to the amplifier and speaker. One hand is used to control the Therman's pitch, and the other is used to control the volume.

↑	Cat.	Qty 1+	Qty 5+
	KC-5475	\$77.95	\$67.50
12VAC PLUGPACK TO SUIT	MP-3020	\$19.95 ea	

AV KITS - VIDEO

IR REMOTE EXTENDER MKII

Refer: **Silicon Chip Magazine October 2006**

Operate your DVD player or digital decoder using its remote control from another room. It picks up the signal from the remote control and sends it via a 2-wire cable to an infrared LED located close to the device. This improved model features fast data transfer, capable of transmitting Foxtel digital remote control signals using the Pace 400 series decoder. Kit supplied with case, screen printed front panel, PCB with overlay and all electronic components.

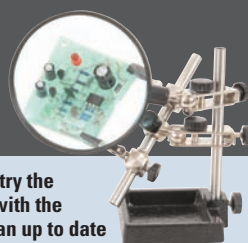
- Required: 9VDC and 2-wire cable for extending the IR-Tx lead (use WB-1702).
- PCB: 79 x 47mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5432	\$28.95	\$25.95
9VDC PLUGPACK TO SUIT	MP-3146	\$17.95 ea	
2-WIRE CABLE TO SUIT	WB-1702	\$0.50 per metre	

CAN'T FIND THE KIT YOU'RE LOOKING FOR?

KIT BACK CATALOGUE



If you can't find what you're looking for, try the Jaycar Kit Back Catalogue. To keep up with the constant flow of new kits and maintain an up to date in-store line-up of projects, older and slow moving kits are returned to our central warehouse. We have included in this catalogue a number of the Kits that form our Back Catalogue. The range is divided up into sections shown at the bottom of the kit pages. In this listing is included a brief description, the reference magazine and issue date of the article, a catalogue reference number and a unit price.

Magazine Icons

EA Electronics Australia (EA)	SILICON CHIP Silicon Chip Magazine (SC)	Kwik Kit Range of easy to assemble kits (no articles available) (KK)
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Issue is referenced by month then year (MM/YY). If the article ran over several months only the first month is referenced.

DOZENS OF KITS LISTED ON THE BOTTOM OF MOST KIT PAGES



For the absolutely latest list refer to our website
www.jaycar.com.au/kitbackcatalogue

Back catalogue kits are not normally available in Jaycar Stores; you can **ONLY** access information about them on our website.

Three easy ways to order these Kits:

1. Order online at www.jaycar.com.au
2. Call our Free Call Order Hotline on 1800 022 888
3. Use the order form on page 527 and fax it to us

KIT BACK CATALOGUE - AV VIDEO KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

Description	Magazine	Issue	Cat.	1+
Component Video RGB Converter	SC	05/04	KC-5388	\$99.95
Dr Video Enhancer/Stabiliser MkII	SC	06/04	KC-5390	\$99.95
RGB to Component Video Converter	SC	08/04	KC-5398	\$89.95

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see above.

Description	Magazine	Issue	Cat.	1+
Video Enhancer / Stabiliser Kit	EA	08/97	KA-1798	\$78.95
Video Enhancer & Y/C Separator	SC	08/04	KC-5394	\$179.00

AUTOMOTIVE KITS

GPS DATA LOGGER/TRACKER KIT

Refer: **Silicon Chip Magazine November 2013**

Precisely records where your car, boat or aeroplane has travelled over time, which you can playback on software such as Google Earth to map your journey. It's a great device for off-road drivers, sailors, farmers and grey nomads and can record a lifetime of travelling onto a single SD card.

- Records the route, time & date on an SD card (available separately) each time the vehicle is used
- Stored SD card data can be displayed in Google Earth or other mapping software
- Records points of interest (POI) at the press of a button*. In Google Earth, each POI marker is displayed as a yellow pin with an associated time & distance from the start
- Records in up to five formats: Google Earth KML, GPS Exchange, raw NMEA data & two Microsoft Excel compatible formats
- Can record POI locations in a spreadsheet called LOG.XLS and can record a travel diary with private & business entries in a spreadsheet called DIARY.XLS
- When diary recording is turned on, pressing the POI button during a trip means that the distance travelled (in km) is recorded in the 'Business' column of DIARY.XLS
- Powered from the vehicle's 12V battery & can be permanently wired into circuit.

Kit supplied with silk-screened PCB, enclosure (150 x 80 x 30mm) with label, pre-programmed PIC, GPS module, and electronic components.
*Power cable and push button switches for POI and travel available separately depending on your application.

The SMD components are already pre-soldered to the PCB to save you the hassle.

↑	Cat.	Qty 1+	Qty 5+
	KC-5525	\$149.00	\$133.95

COURTESY INTERIOR LIGHT DELAY

Refer: **Silicon Chip Magazine June 2004.**

Many modern cars feature a time delay on the interior light. It still allows you time to buckle up and get organised before the light dims and finally goes out. This kit provides that feature for cars which don't already provide it. It has a soft fade out after a set time has elapsed, and features much simpler universal wiring than previous models we have had.

- Kit supplied with PCB with overlay, and all electronic components.
- Suitable for circuits switching ground or +12V or 24VDC (car & truck with negative chassis.)
- PCB: 78 x 46mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5392	\$22.95	\$20.35
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

CAR BATTERY MONITOR

Refer: **Electronics Australia May 1987**
Don't get caught with a flat battery! This simple electronic voltmeter lets you monitor the condition of your car's battery so you can act before getting stranded. 10 round 5mm LEDs tell you your battery's condition.

- Kit includes PC board and all components.
- PCB: 62 x 39mm

↑	Cat.	Qty 1+	Qty 5+
	KA-1683	\$19.95	\$17.70
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

HEADLIGHT REMINDER FOR CARS

Refer: **Silicon Chip Magazine August 2001**

Nothing is more frustrating than getting into your car early in the morning, only to discover that you had left your headlights on the night before, running your car's battery flat. Features include a modulated alarm, ignition and lights monitoring, optional door switch detection, time-out alarm and a short delay before the alarm sounds. Build and install this hassle-saving kit and enjoy a feature in your car that many luxury vehicle owners have long taken for granted. Kit includes quality solder masked PCB with overlay, case with screen printed lid and all electronic components. 12VDC.

- PCB: 78 x 49mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5317	\$27.95	\$24.95

HIGH ENERGY IGNITION KIT FOR CARS

Refer: **Silicon Chip Magazine November & December 2012**

Use this kit to replace a failed ignition module or to upgrade a mechanical ignition system when restoring a vehicle. Suits vehicles with points, hall effect/lumenition, reluctor and optical sensors (Crane and Piranha) pickup, and virtually any ignition system that uses a single coil, even those controlled by an engine management computer.

- Trigger invert option
- Adjustable dwell time
- Option for output or follow input
- Tachometer output
- Adjustable debounce period
- Dwell compensation for battery voltage
- Simplified design using ignition IGBT to switch the coil
- Coil switch-off with no trigger signal

A spark self-test feature allows the dwell to be easily adjusted to suit the coil in use. Kit supplied with silk-screened PCB, diecast enclosure (111 x 60 x 30mm), pre-programmed PIC and PCB mount components for all four trigger/pickup options.

Requires: Miscellaneous mounting hardware specific to the individual installation.

Note: Hall-effect and optical pick-ups not included.

↑	Cat.	Qty 1+	Qty 5+
	KC-5513	\$55.00	\$49.45

KIT BACK CATALOGUE - AUTO KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

Description	Magazine Issue	Cat.	1+
12V LED - PCB for Festoon 31mm (Interior Light)	SC 03/03	KC-5354	\$4.95
12V LED - PCB for Festoon 41mm (Interior Light)	SC 03/03	KC-5355	\$4.95
AV Booster/ Repeater Amplifier	SC 04/03	KC-5350	\$99.95
Car Air Conditioner Controller	SC 01/07	KC-5437	\$39.95
Car Turbo Timer with Case - PIC Based	SC 08/07	KC-5451	\$44.95
Delta Throttle Timer	SC Book	KC-5373	\$24.95
Digital Fuel Adjuster	SC Book	KC-5385	\$69.95
Digital Fuel Mixture Display	SC 09/00	KC-5300	\$67.95
Digital Pulse Adjuster	SC Book	KC-5384	\$79.95
Digital Speedo Corrector	SC Book	KC-5380	\$44.95
Digital Speedometer/Speed Alert	SC 11/99	KC-5279	\$67.95
Driving Light Protector	SC 09/02	KC-5337	\$19.95
Engine Immobiliser MK II	SC 12/98	KC-5255	\$29.95
Frequency Switch	SC Book	KC-5378	\$37.95
Fuel Cut Defeater	SC 02/07	KC-5439	\$19.95
Gear Indicator	SC 01/03	KC-5344	\$69.95

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see page 54 or 62.

Description	Magazine Issue	Cat.	1+
G-Force Meter	SC	KC-5504	\$49.95
Independent Electronic Boost Controller	SC Book	KC-5387	\$79.95
Intelligent Turbo timer	SC Book	KC-5383	\$44.95
Knock Sensor to suit KC-5442	SC 03/07	KC-5444	\$18.95
LED Duty Cycle Meter for Fuel Injected Cars	SC Book	KC-5375	\$54.95
Marine Engine Speed Equaliser	SC 11/09	KC-5488	\$39.95
Nitrous Fuel Mixture / Motor Speed Controller	SC Book	KC-5382	\$24.95
PCB for 12V LED Bayonet Style Lamp Kit (Stop / Tail)	SC 03/03	KC-5349	\$8.95
PCB for 31mm Festoon Style (Interior Light) Kit	SC 03/03	KC-5354	\$4.95
PCB for 41mm Festoon Style (Interior Light) Kit	SC 03/03	KC-5355	\$4.95
Quick Brake - Emergency Light Trigger	SC Book	KC-5373	\$24.95
Turbo Timer	SC 11/98	KC-5254	\$29.95
Turn Your Car Into A Volvo	SC 08/99	KC-5273	\$39.95
Universal High Energy Ignition Kit	SC 12/05	KC-5419	\$94.95
Voltage Monitor	SC 05/06	KC-5424	\$22.95

AUTOMOTIVE KITS (CONTINUED)

10A 12VDC MOTOR SPEED CONTROLLER

Refer: Silicon Chip Magazine June, 1997

Use this kit for controlling 12V DC motors in cars such as fuel injection pumps, water/air intercoolers and water injection on performance cars. You can also use it for headlight dimming and for running 12V DC motors in 24V vehicles. The circuit incorporates a soft start feature, which is used to reduce inrush currents, particularly if the kit is to control 12V incandescent lamps. As presented, the kit will control loads up to 10 amps, although the addition of an extra MOSFET transistor will double that capacity to an amazing 20 amps.

- Kit includes PCB plus all electronic components to build the 10A version.
- Extra MOSFET available separately, ZT2450.
- PCB: 69 x 51mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5225	\$27.95	\$24.95
OPTIONAL MOSFET TO SUIT	ZT-2450	\$9.95 ea	
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

AUTOMATIC HEADLIGHTS KIT FOR CARS

Refer: Silicon Chip Magazine October 2013

Like modern cars, this kit will turn your car headlights on automatically if you forget to turn the lights on when it gets dark. If you forget to turn your lights off when you park it can alert you with a buzzer to avoid a flat battery.

- Works with incandescent or halogen lights (May work with other types of light with daytime running lights disabled but this has not been tested)
- Suits majority of vehicles made in the last 25 years without automatic lights (lights switched on high side)
- Optional daytime running lights
- Adjustable light sensitivity
- Adjustable switch-off delay
- Adjustable daytime running brightness from zero up to nearly full brightness
- Under-voltage cut-out, to prevent battery over-discharge and to allow engine starting in cold weather/with a weak battery
- 25kHz PWM drive with EMI filtering to minimize radio interference
- Optional 'leaving home' feature turns lights on for 30 seconds (adjustable) after doors unlocked (requires central locking)
- Optional 'coming home' feature leaves lights on for 30 seconds (adjustable) after ignition is switched off
- Warning buzzer to indicate if lights have been left on (optional - buzzer included)
- Virtually no battery drain with lights and ignition off
- Protected against load dumps and other voltage spikes
- Can drive external relay for separately wired tail or instrument lamps

Kit supplied with double sided, solder-masked and screen-printed PCB, die-cast case (111 x 60 x 30mm), buzzer and electronic components. Cabling not included.

Note: Some SMD soldering required.

Specifications	
Operating voltage	11.5-15V DC
Operating current	approximately 30mA
Quiescent current	typically <1uA
Total light power	1-12A, 12-150W nominal (up to 175W @ 14.4V)
Voltage drop	typically <0.25V
Dissipation	typically <3W



↑	Cat.	Qty 1+	Qty 5+
	KC-5524	\$59.95	\$53.95

ECONOMY ADJUSTABLE TEMPERATURE SWITCH

Ref: High Performance Electronic Projects for Cars - Silicon Chip Publications.

If you don't need the display, or the huge operational range of the High Range Adjustable Temperature Switch with LCD (KC-5376), then this unit is a great alternative. It has an adjustable switching temperature up to 245°C, and it can be configured to trigger with rising or falling temperature. It has adjustable hysteresis (the difference between on/off temp), which is a great feature many other units do not possess. It can be used to operate cooling fans on a radiator or amplifier, over-temp warning lights or alarms, and much more. The small temperature sensor reacts quickly to temp changes. Kit supplied with PCB, NTC Thermistor, and all electronic components.

- PCB: 105 x 60mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5381	\$35.95	\$31.45
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

THRESHOLD VOLTAGE SWITCH KIT

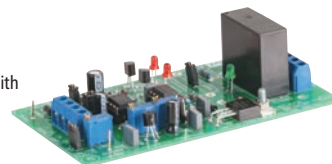
Refer: Silicon Chip Magazine July 2014

A simple but versatile device to switch a relay when its input voltage crosses a threshold. Use it to prevent a lead-acid battery from being over-charged or in automotive applications to trigger an extra fuel pump under high boost, anti-lag waste-gate shutoff for example. A PCB mount 12V DPDT relay is supplied but the circuit caters for other types depending on the voltage and current you want to switch. In conjunction with a standard battery charger and suitable resistor, the device can also be used to trickle charge a lead-acid battery. Kit supplied short-form with double sided, solder-masked and screen-printed PCB, onboard relay and electronic components. Cabling and case not included.

- 5 - 24VDC operation
- Adjustable trigger threshold
- Trigger on high or low voltage
- Output state indicator LEDs
- Multiple relay options (Kit supplied with onboard relay)
- PCB size: 107 x 61mm

Optional relays:

24V 12V DPDT PCB Relay: SY-4053
30A 12V SPST Horn Relay: SY-4040
30A 12V SPDT Horn Relay: SY-4070
60A 12V SPDT Horn Relay: SY-4074



↑	Cat.	Qty 1+	Qty 5+
	KC-5528	\$34.95	\$31.45

UNIVERSAL VOLTAGE SWITCH

Refer: High Performance Electronic Projects for Cars - Silicon Chip Magazine Publications.

This is a universal module which can be adapted to suit a range of different applications. It will trip a relay when a preset voltage is reached. It can be configured to trip with a rising or falling voltage, so it is suitable for a wide variety of voltage outputting devices eg., throttle position sensor, air flow sensor, EGO sensor. It also features adjustable hysteresis (the difference between trigger on/off voltage), making it extremely versatile. You could use it to trigger an extra fuel pump under high boost, anti-lag wastegate shutoff, and much more. Kit supplied with PCB, and all electronic components.

- PCB: 105 x 60mm.

↑	Cat.	Qty 1+	Qty 5+
	KC-5377	\$34.95	\$31.45
RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea	

AUTOMOTIVE - MARINE KITS

ULTRASONIC ANTI-FOULING FOR BOATS

Refer: Silicon Chip Magazine September/October 2010

Many of you know that you can buy imported marine growth electronic antifouling systems that cost up to \$8000. Jaycar, with Silicon Chip have developed a similar system based on this technology and information in the public domain. This project uses the same ultrasonic waveforms and virtually identical ultrasonic transducers mounted in sturdy polyurethane housings. By building yourself you save a fortune! Standard unit consists of control electronic kit and case, pre-built ultrasonic transducer, potting and gluing components and housings. The single transducer design of this kit is suitable for boats up to 10m (32ft); boats longer than about 14m will need two transducers and drivers. Basically all parts supplied in the project kit including wiring. (Price includes epoxies).

- 12VDC (Could be powered by a solar panel/wind generator)
- Suitable for power or sail
- Works with aluminium and fibreglass boats (not suitable for timber, ferro cement or fibreglass foam sandwich construction)
- Output frequency range: 19.08 - 41.66kHz in 14 bands with 200ns steps.
- Frequency sweep in each band: 12 frequencies ranging from 80Hz spacings at 20kHz to 344Hz steps at 40kHz
- Signal burst period: 600ms at 20kHz, 300ms at 40kHz (12000 cycles/ burst)
- Output drive. 250VAC
- Supply Voltage. 11.5V to 16V maximum
- Current drain: 220mA average at 12V driving a 3nF load
- PCB: 78 x 104mm

NOW INCLUDES PRE-BUILT TRANSDUCER

SEE OUR ASSEMBLED ULTRASONIC ANTIFOULING DEVICES ON PAGE 241

↑	Cat.	Qty 1+	Qty 5+
	KC-5498	\$269.00	\$245.00

AUTOMOTIVE - MOTOR BIKE

CAPACITOR DISCHARGE IGNITION FOR MOTOR BIKES

Refer: Silicon Chip Magazine May 2008

Many small petrol engines fitted to modern motor bikes use a capacitor discharge ignition (CDI) to improve performance and enhance reliability. The only downside of this is that if the CDI ignition module fails, a replacement can be very expensive. This kit will replace many failed factory units and is designed for engines with separate generator & trigger coils and which generate a positive high voltage to charge the capacitor before firing. Most CDI ignitions operate this way, but there are variations. Luckily, this CDI module uses cheap and readily available parts and is worth a try before shelling out lots of hard-earned cash for a genuine replacement module. Supplied with solder masked PCB and overlay, case and components. Some mounting hardware required.

- PCB: 45 x 64mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5466	\$24.95	\$22.35

COMPUTER KITS

FULL FUNCTION SMART CARD READER / PROGRAMMER

Refer: Silicon Chip Magazine July 2003

Allows you to program both the microcontroller and EEPROM in the popular gold, silver and emerald wafer cards. It hooks up to the serial port of your PC and can be operated as a free-standing unit or installed in a PC drive bay. Cards used need to conform to ISO-7816 standards, which includes ones sold by Jaycar.

Powered by 9V via a 9 - 12VDC plugpack (use MP-3146) or 9V battery.

- Instructions outline software requirements that are freely available on the Internet.
- Kit supplied with PCB, wafer card socket and all electronic components.
- PCB: 141 x 101mm

Jaycar Electronics and Silicon Chip Magazine will not accept responsibility for the operation of this device, its related software, or its potential to be used for unlawful purposes.



↑	Cat.	Qty 1+	Qty 5+
	KC-5361	\$54.95	\$49.45
REGULATED PLUGPACK TO SUIT	MP-3146	\$17.95 ea	

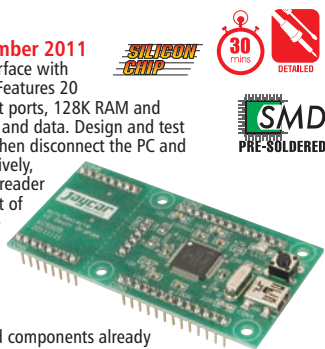
MINIMAXIMATE CONTROLLER

Refer: Silicon Chip Magazine November 2011

A versatile and intelligent controller to interface with your creations, such as home automation. Features 20 configurable digital/analog inputs or output ports, 128K RAM and 256KB flash memory to hold your program and data. Design and test in MMBasic over a USB link from your PC, then disconnect the PC and the programs continue to operate. Alternatively, hard wire a PC monitor, keyboard, SD card reader and amplified speaker to work independent of a PC. Requires 2.3 - 3.6V DC (2 x AA or use plugpack MP-3310). Kit supplied with PCB, pre-programmed and pre-soldered micro, and electronic components.

- PCB: 78 x 38mm

Note: We supply all of the surface mounted components already pre-soldered to save you time and frustration.



↑	Cat.	Qty 1+	Qty 5+
	KC-5505	\$49.95	\$44.90

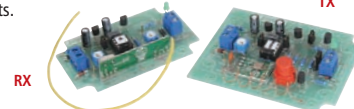
HOUSEHOLD KITS

433MHZ REMOTE SWITCH

Refer: Silicon Chip Magazine January 2009

Suitable for remote control of practically anything up to a range of 200m, for example, as a replacement for a dead garage door opener. The receiver has momentary or toggle output and the momentary period can be adjusted. The receiver can also be used to drive a 12 volt relay - you'll need to add a 12 volt source. Up to five receivers can be used in the same vicinity and spare transmitter kits are available: KC-5474. A versatile kit with endless applications. Short-form kit contains two PCBs and all specified components.

- 433MHz
- Requires case and 9 - 12VDC
- Extra transmitter kit: KC-5474
- PCBs: Tx: 85 x 63mm
Rx: 79 x 48mm



↑	Cat.	Qty 1+	Qty 5+
	Remote Switch Kit	KC-5473	\$47.95 \$42.95

TEMPMASTER MK3 - ELECTRONIC THERMOSTAT KIT

Refer: Silicon Chip Magazine August 2014

This electronic thermostat is ideal for converting a chest freezer into an energy-efficient fridge, converting a fridge into a wine cooler or controlling heaters in home-brew setups, hatcheries and fish tanks. It controls the fridge/freezer or heater directly via its power cable, so there's no need to modify its internal wiring. It can even be adapted to control 12V or 24V fridges or freezers.

An improvement on our popular KC-5476 TempMaster MK2 designed in Feb 2009. It is easier to adjust, has a wider temperature range, uses less power, and virtually immune to relay chatter problems.

- Temperature range: -23 degrees C to 47 degrees C
- Low quiescent power consumption to below 45mW (1.08Wh/day)
- PCB size: 80 x 104mm

Kit supplied short-form with silk-screened PCB, 30A SPST relay, temperature sensor with clamp assembly and components. You'll need to add your own 240V GPO, fused IEC socket, cabling and case. 12V 150mA power required.

↑	Cat.	Qty 1+	Qty 5+
	KC-5529	\$39.95	\$35.90

MAINS TIMER KIT FOR FANS & LIGHTS

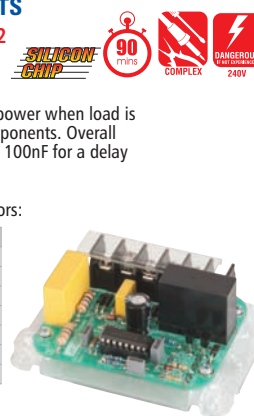
Refer: Silicon Chip Magazine August 2012

This simple circuit provides a turn-off delay for a 230VAC light or a fan, such as a bathroom fan set to run for a short period after the switch has been turned off. The circuit consumes no stand by power when load is off. Kit supplied with PCB, case and electronic components. Overall timing period is set by capacitor C1. Supplied with 100nF for a delay of 1, 5, 10 or 20 minutes set by one of 4 links.

For alternate times purchase the following capacitors:

C1	LK1	LK2	LK3	LK4
330nF	1 hour	30 mins	15 mins	4 mins
220nF	45 mins	20 mins	10 mins	2.5 mins
150nF	30 mins	15 mins	7.5 mins	2 mins
100nF*	20 mins	10 mins	5 mins	1 min
22nF	4 mins	2 mins	1 min	15 sec
15nF	3 mins	1.5 mins	45 sec	10 sec
4.7nF	1 min	30 sec	15 sec	5 sec

- 100nF supplied
- Handles loads up to 5A
- PCB: 60 x 76mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5512	\$42.95	\$38.45

KIT BACK CATALOGUE - COMPUTER KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see page 54 or 62.

Description	Magazine	Issue	Cat.	1+	Description	Magazine	Issue	Cat.	1+
AVR Adaptor Board for KC-5340	SC	03/06	KC-5421	\$34.95	Serial Programmer for DSPIC30F PIC Controller	SC	05/08	KC-5467	\$74.95
Front End Pre-Amp For PC Sound Cards	EA	08/98	KA-1811	\$29.95	SD/MMC Card Webserver In a Box	SC	11/09	KC-5489	\$89.95
PC Infrared Transceiver Kit	SC	12/01	KC-5323	\$21.95	Test Instrument Interface for PC Sound Cards	EA	08/98	KA-1811	\$29.95
PC IR Remote Control	SC	08/03	KC-5366	\$39.95	USB Experimenter's Interface	Kwik Kit		KV-3600	\$69.95
PIC Programmer Checkerboard	SC	02/01	KC-5307	\$99.95	USB Power Injector	SC	10/04	KC-5399	\$29.95

HOUSEHOLD KITS

HOUSEHOLD KITS (CONTINUED)

TEMPERATURE SWITCH

Ideal for turning fans or heaters on at certain temperatures.

This kit operates a relay when a preset temperature is exceeded and drops-out the relay when temperature drops. The relay included is capable of switching small currents only, so a larger relay or switching device should be employed if switching mains voltages or heavy currents. Ideal as a thermostat, ice alarm, hydroponics applications, etc. A small trimpot is used to adjust the cutout temperatures for the relay in the range of approx -30 to +150° celsius.

- PCB NTC thermocouple and components
- 12VDC, 100mA
- PCB: 56 x 28mm



	Cat.	Qty 1+	Qty 5+
12VDC PLUGPACK TO SUIT	KG-9140	\$24.95	\$22.35
RECOMMENDED BOX - UB5	HB-6015	\$17.95 ea	\$2.95 ea

DO NOT DISTURB PHONE TIMER KIT

Refer: Silicon Chip Magazine May 2013 (Landline Phones)

Stop those annoying and intrusive phone calls when you don't want to be disturbed, say at meal or nap time for example. Set the timer duration between 15 to 120 minutes and the caller will get an engaged signal until the timer times out. Kit supplied with silk-screened PCB, black enclosure (83 x 54 x 31mm) with label, pre-programmed PIC, PCB mount components and phone lead.

- Five times settings: 15, 30, 60, 90 and 120 minutes
- Time set indication
- Time remaining indication
- Automatically returns phone to "ready" (on hook) after time-out
- Easy push-button timer setting
- No batteries required
- Works with multiple phone extensions in house.
- End button



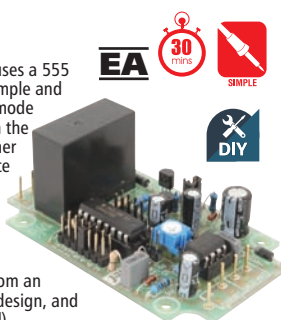
	Cat.	Qty 1+	Qty 5+
12VDC PLUGPACK TO SUIT	KG-9140	\$24.95	\$22.35
RECOMMENDED BOX - UB5	HB-6015	\$17.95 ea	\$2.95 ea

THE 'FLEXITIMER'

Refer: Electronics Australia March 1991

Now in it's third revision by Jaycar, the flexitimer uses a 555 timer coupled with a binary counter to create a simple and consistent timing circuit. In the original one-shot mode the timer will count up to the set point and switch the relay once. In the additional interval mode the timer will continue switching the relay at each recurrence of the set point. The circuit can be set at 11 time points with the minimum being 7 seconds and each step doubling the time to a maximum of 2 hours. Other times are possible by changing components C1, R1, and R2. Features of the third revision include a restarting the one-shot mode from an external switch or signal, a more energy efficient design, and space on the PCB for terminal blocks (not included).

- Requires 12- 15V DC (use Cat. MP-3147 plugpack)
- Optional UB5 case (Cat. HB-6015)
- PCB Dimensions: 74 x 47mm



	Cat.	Qty 1+	Qty 5+
12VDC PLUGPACK TO SUIT	KA-1732	\$22.95	\$20.35
RECOMMENDED BOX - UB3	HB-6013	\$17.95 ea	\$3.95 ea

18M IR LIGHT BARRIER KIT

This kit consists of an infrared receiver and transmitter and will shoot an IR beam 18 meters. Use with driveway or pathway monitoring, automatic garage door triggering or shop front/office entry monitoring. Includes a daylight filter to eliminate false triggering in sunlight. The receiver's relay can be used to trigger an alarm, siren or relevant triggering device.

- TX requires 9VDC 90mA;
- RX 12VDC 100mA.



	Cat.	Qty 1+	Qty 5+
12VDC PLUGPACK TO SUIT	KG-9096	\$39.95	\$35.90

LIQUID LEVEL SENSOR

When two contacts are shorted by liquid, an LED will illuminate. Use in applications such as an overflow alarm and rain detector. Connect Relay Card KG-9142 for a relay output to operate lights, sirens or other warning devices.

- Project requires 9VDC.
- Kit supplied with Kwik Kit PCB and all electronic components.
- PCB: 45 x 15mm



	Cat.	Qty 1+	Qty 5+
12VDC PLUGPACK TO SUIT	KG-9138	\$9.95	\$8.75
RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea	

GARBAGE & RECYCLING REMINDER KIT

Refer: Silicon Chip Magazine January 2013

Easy to build kit that reminds you when to put which bin out by flashing the corresponding brightly coloured LED. Up to four bins can be individually set to weekly, fortnightly or alternate week or fortnight cycle. LEDs will flash for up to 18 hours or when you press the clear button. Features coloured LEDs to match bin lid, disable function for any LED, easy to program, optional individual day programming, week advance facility, 15 minute advance or hold facility, powered by 3V lithium cell, and low power drain. Kit supplied with silk-screened PCB, black enclosure (83 x 54 x 31mm), label, pre-programmed PIC, battery & PCB mount components.

- PCB: 75 x 47mm



	Cat.	Qty 1+	Qty 5+
12VDC PLUGPACK TO SUIT	KC-5518	\$33.95	\$29.45

KIT CONSTRUCTORS MANUAL

A must for amateur constructors. Contains much useful information for the more experienced. Huge amounts of information on construction and identification of parts.

- 8 pages.



	Cat.	Qty 1+
12VDC PLUGPACK TO SUIT	BI-8200	\$2.00

KIT BACK CATALOGUE - HOUSEHOLD KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

Description	Magazine	Issue	Cat.	1+
Clock Watchers Clock Kit with Blue LEDs	SC	06/05	KC-5416	\$189.00
Clockwatcher's LED Clock - Analogue & Digital	SC	06/05	KC-5404	\$129.00
Digital Reaction Timer Kit	SC	06/03	KC-5360	\$24.95
Door Bell Remote Control	SC	09/04	KC-5397	\$14.95
Driveway Sentry	SC	11/04	KC-5402	\$179.00
Jacob's Ladder High Voltage Display Kit	SC	09/95	KC-5191	\$34.95
Remote Control Digital Timer	SC	08/10	KC-5496	\$39.95

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see page 54 or 62.

Description	Magazine	Issue	Cat.	1+
SMS Controller for Nokia Mobile Phones	SC	10/04	KC-5400	\$57.95
Tempmaster Fridge Controller MK II	SC	02/09	KC-5476	\$32.95
UHF Remote Controlled Main Switch	SC	02/08	KC-5462	\$99.95
V8 Sounding Doorbell - Full Kit	SC	01/05	KC-5405	\$79.95
V8 Sounding Doorbell - Short Form	SC	01/05	KC-5406	\$49.95
Water Level LED Indicator MkII	SC	07/07	KC-5449	\$39.95
Water Tank Level Meter - PIC Based	SC	11/07	KC-5460	\$109.00
Water Tank Level Meter Telemetry Base Station	SC	01/08	KC-5461	\$84.95

POWER KITS

SOFT START KIT FOR POWER TOOLS

Refer: Silicon Chip Magazine July 2012

This kit stops that dangerous kick-back when you first power up an electric saw, router or other mains-powered hand tool. Place it in line with the power tool's mains power cord and when you squeeze the power tool's trigger it will slowly spin up and be at full power after about a second. This soft start process can help prevent damage to the job your working on, and to yourself when kick-back torque jerks the power tool out of your hand. Kit supplied with PCB, screen printed case, 2m power cord and specified electronic components.



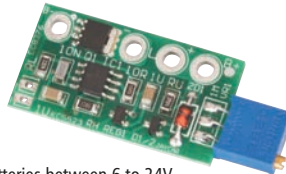
- 240VAC
- Minimum load power: 100W
- Maximum load current: 10A
- PCB: 81 x 59mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5511	\$55.00	\$49.45

BATTERY SAVER KIT FOR RECHARGEABLE LITHIUM & SLA BATTERIES

Refer: Silicon Chip Magazine September 2013

This tiny circuit fits in between the battery and load and cuts off the power when the battery becomes flat to prevent the battery over-discharging and becoming damaged. Suitable for use with cordless power tools, emergency lights, small to medium UPS (up to about 300VA) and a wide variety of other devices.



- Suits most SLA, Li-ion, Li-Po and LiFePO4 batteries between 6 to 24V
- Uses very little power (<5uA)
- Handles 20A continuous, 30A peak (Charge or discharge)
- Cut-off voltage adjustable from 5.25 to 25.5V
- 0.3 - 2V hysteresis, depending on battery type and voltage
- Small PCB to fit in small spaces (38 x 18.5mm)
- Battery can be recharged once cut-out has engaged (maximum 1.5A)

SMD
PRE-SOLDERED

There is also provision for connecting an LED or external buzzer (not included)

Supplied with double sided, soldermasked and screen-printed PCB with SMDs pre-soldered*, voltage setting diodes and resistors, and components.
PCB size: 34 x 18.5mm

- Note: We've pre-soldered all of the surface mount components to save you time and frustration, apart from the three voltage setting resistors.

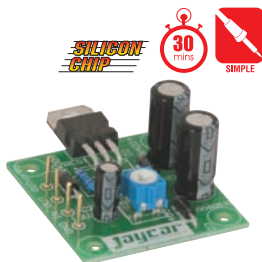
↑	Cat.	Qty 1+	Qty 5+
	KC-5523	\$33.95	\$29.45

1.3V TO 22VDC 1A VOLTAGE REGULATOR KIT

Refer: Silicon Chip Magazine May 2007

This handy voltage regulator can provide up to 1,000mA at any voltage from 1.3 to 22VDC. Ideal for experimental projects or as a mini bench power supply. Kit supplied with PCB and all electronic components.

- Heatsink may be regulated depending on output current.
- PCB: 38 x 35mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5446	\$19.95	\$17.70
	RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea

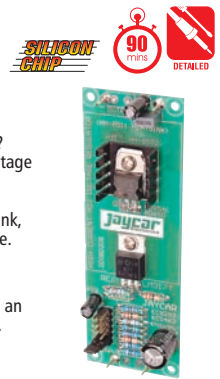
3V, 5V, 6V, 9V, 12V OR 15V 4A IMPROVED LOW VOLTAGE REGULATOR

Refer: Silicon Chip Magazine May 2008

Need to operate a CD, DVD or MP3 player from the cigarette lighter socket in your car? Or perhaps run some powered speakers from the power supply inside your PC? The odds are you'll need this little adaptor to step the voltage down. It has a push-on jumper shunt to select one of six common output voltages 3V, 5V, 6V, 9V, 12V or 15V and, when used with an appropriate input voltage and heat sink, can deliver up to four amps at the selected output voltage. Kit includes PCB and all specified components.

Please note that to ensure trouble free 4 amp output, a heatsink with a thermal resistance of 1.4°C per watt, and an input voltage 3VDC above the output voltage is required.

- PCB: 108 x 37mm



↑	Cat.	Qty 1+	Qty 5+
	KC-5463	\$19.95	\$17.70

3V TO 9V DC TO DC CONVERTER

Refer: Silicon Chip March 2004.

9V batteries are a great source of portable power, but let's face it - they don't last long if you want more than a few milliamps, and they are not real cheap either. This great little converter allows you to use regular Ni-Cd or Ni-MH 1.2V cells, or Alkaline 1.5V cells for 9V applications. Using low cost, high capacity rechargeable cells, the kit will pay for itself in no-time! You can use any 1.2-1.5V cells you desire. Imagine the extra capacity you would have using two 9000mAh D cells in replacement of a low capacity 9V cell. Kit supplied with PCB, and all electronic components.



- PCB: 59 x 29mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5391	\$18.95	\$16.95
	RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea

DC RELAY SWITCH

Refer: Silicon Chip Magazine November 2006

An extremely useful and versatile kit that enables you to use a tiny trigger current - as low as 400uA at 12V to switch up to 30A at 50VDC. It has an isolated input, and is suitable for a variety of triggering options, including an AC or oscillating signal. It also has a relay-on LED indicator.



- PCB, relay and components.
- 12VDC 150mA.
- PCB: 46 x 61mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5434	\$19.95	\$17.70
	RECOMMENDED BOX - UB5	HB-6015	\$2.95 ea

12VDC RELAY CARD

Add a relay output to your equipment.

This kit will close a relay's contacts with as little as 5mA to trigger the circuit. Literally any kit you see on these pages that uses an LED as a trip-condition indicator, can be used with this nifty project. Use the relay to sound buzzers, switch on lights, operate solenoids, trigger alarms, etc. Operation: common ground - output LED to ground

- Kit includes Kwik Kit PCB, relay plus electronic components.
- LED cathode must be connected to ground.
- PCB: 45 x 17mm.



↑	Cat.	Qty 1+	Qty 5+
	KG-9142	\$12.95	\$11.35

KIT BACK CATALOGUE - LIGHTING KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see page 54 or 62.

Description	Magazine Issue	Cat.	1+
12VDC Emergency Lighting Controller	SC 01/08	KC-5456	\$69.95
Basketball Scoreboard & Console - Wireless	SC 03/05	KC-5408	\$799.00
Basketball Scoreboard Extra Scoreboard - Wireless	SC 03/05	KC-5409	\$649.00

Description	Magazine Issue	Cat.	1+
Bass Blazer Bar Graph Display	SC 02/01	KC-5305	\$49.95
Luxeon LED Star Module Driver	SC 05/04	KC-5389	\$29.95
Neon Tube Sound Display Kit	SC 11/01	KC-5322	\$19.95

POWER KITS (CONTINUED)

LED BATTERY VOLTAGE INDICATOR

Refer: Electronics Australia Sept 1995

Quick battery condition indication.

This tiny circuit measures just 25mm x 25mm and will provide power indication and low voltage indication using a bi-colour LED, and can be used in just about any piece of battery operated equipment. The circuit is suitable for equipment powered from about 6-30VDC. With a simple circuit change, the bi-colour LED will produce a red glow to indicate that the voltage has EXCEEDED a preset value.



- PCB, bi-colour LED and components
- 6-10VDC 3-8mA
- PCB: 25 x 24mm

↑	Cat.	Qty 1+	Qty 5+
RECOMMENDED BOX - UB5	KA-1778	\$12.95	\$11.35
	HB-6015	\$2.95 ea	

UNIVERSAL +/- 15VDC 1A POWER SUPPLY REGULATOR

Refer: Silicon Chip Magazine March 2011

This is an upgraded version of the original universal power supply kit published in August 1988. One small board and a handful of parts will allow you to create either a regulated $\pm 15V$ rail or $\pm 15VDC$ single voltage from a single winding or centre tap transformer (not included). Substitute different regulators to those supplied and you can alter the output voltage to your requirements. Upgrades in this design include improved parts layout and terminal blocks for inputs and outputs. Kit includes PCB and all components for 15 volt versions, transformer sold separately.



- PCB: 72 x 30mm

Power Supply Options:

- $\pm 15V$ rails from 15V AC plug pack (MP-3059) or transformer (MM-2002)
- $\pm 15V$ rails from 30V AC centre tapped transformer (MM-2007)
- $\pm 15VDC$ from a single or centre tap transformer.
- Different voltages using 78xx and 79xx series regulators (not included)

↑	Cat.	Qty 1+	Qty 5+
Transformer to suit	KC-5501	\$17.95	\$15.95
Transformer to suit	MM-2002	\$11.95 ea	
Transformer to suit	MM-2007	\$8.95 ea	
Plugpack to suit	MP-3059	\$29.95 ea	

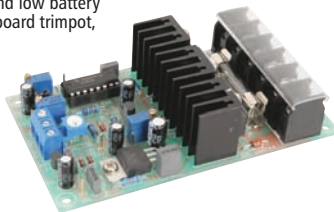
12/24VDC 20A MOTOR SPEED CONTROLLER

Refer: Silicon Chip Magazine June 2011

Control the speed of 12 or 24VDC motors from zero to full power, up to 20A. Features optional soft start, adjustable pulse frequency to reduce motor noise, and low battery protection. The speed is set using the onboard trimpot, or by using an external potentiometer (available separately).



- Supplied with solder masked PCB with overlay and all onboard electronic components.
- Optional 10K external potentiometer: use RP-3510
- PCB: 106 x 60mm



↑	Cat.	Qty 1+	Qty 5+
RECOMMENDED BOX - UB3	KC-5502	\$43.95	\$38.45
	HB-6013	\$3.95 ea	

240V 10A DELUXE MOTOR SPEED CONTROLLER

Refer: Silicon Chip Magazine May 2009

Another motor speed controller? This one is a little bit different and offers boutique performance in the world of speed controllers. While the simpler circuit of our other motor controller kit (KC-5477) will control a motor's speed fairly well, it can't provide maximum speed as the output voltage is limited to about 160VAC maximum. It also doesn't provide great speed regulation and torque at low speeds. The deluxe kit addresses all these issues and provides full speed control from near zero to maximum RPM, good speed regulation under load, very smooth low speed operation and is rated for devices up to 2300W. It also has soft-start to eliminate the "kick" from larger power tools and has interference suppression filtering, fuse protection and over-current protection with limiting.



This kit really is the duck's guts for motor speed control. The case has the tricky cutouts pre-machined, but a little bit of extra drilling is required to complete the project.

- Overlay PCB and all components.
- Machined case included
- PCB: 112 x 142mm

Note: Not for use with Induction Motors (see KC-5509 in the Kit Back Catalogue below)

↑	Cat.	Qty 1+	Qty 5+
	KC-5478	\$109.00	\$89.95

240V 10A MOTOR SPEED CONTROLLER KIT WITH SOFT START

Refer: Silicon Chip Magazine Feb/Mar 2014

A significant improvement on our successful KC-5478 10A Motor Controller Kit. Designed for controlling the speed of power tools such as electric drills, lawn edgers, circular saws, routers or any other appliance with a universal (brush-type) motor, rated up to 10A. The new design is easier to build, has a smoother control, more "grunt" at low speed, features soft start to avoid dangerous kick-back, and improved overload protection. The case has the tricky cut-outs pre-machined, but a little bit of fine tuning may be required to complete the project. Kit includes screen printed machined case, double-sided PCB, GPO, programmed micro and electronic components.



- Extremely smooth and precise motor speed control
- Speed can be controlled from zero to maximum
- Superb speed regulation under load
- Adjustable speed regulation with feedback control
- Excellent low-speed motor operation
- 2300W (10A) rating
- Cycle-by-cycle current overload protection
- Over-current limiting
- Soft starting
- NTC Thermistor for initial surge current limiting
- Fused protection
- Rugged case with interference suppression included
- For 230VAC brush (universal) motors
- Rating: 10A, 230VAC
- Speed adjustment: Zero to motor's maximum
- PWM frequency: 980Hz
- Cycle-by-cycle current limiting: 23A peak
- Average current limiting: 15A
- Soft start rate: Up to 2.54s from zero to full speed
- NTC thermistor: 10-ohm at 20°C, <0.1-ohm @10A



Note: Not suitable for inducted or shaded-pole motors

↑	Cat.	Qty 1+	Qty 5+
	KC-5526	\$155.00	\$133.95

KIT BACK CATALOGUE - POWER KITS

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To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see page 54 or 62.

Description	Magazine Issue	Cat.	1+
12V 120W 3-Step MPPT Solar Charge Controller	SC 02/11	KC-5500	\$129.00
12VDC-240VAC Inverter - Super Simple	Kwik Kit	KG-9006	\$19.95
12VDC Car Battery Charger/Regulator	SC 07/97	KA-1795	\$20.00
Battery Zapper Mkl - Lead Acid	SC 08/05	KC-5414	\$39.95
Battery Zapper Mkl Add-on	SC 05/06	KC-5428	\$59.95

Description	Magazine Issue	Cat.	1+
Battery Zapper Mkl for SLA Batteries	SC 05/06	KC-5427	\$109.00
Power Tool Battery Charge Controller	SC 12/06	KC-5436	\$39.95
Speed Control Kit for Induction Motors - Improved	SC 08/13	KC-5509	\$249.00
Universal Drill/Motor Speed Controller	SC 02/09	KC-5477	\$64.95
Universal +/- 15VDC Power Supply	SC 10/05	KC-5418	\$19.95

POWER KITS (CONTINUED)

"BURP" BATTERY CHARGER KIT FOR NI-CD & NI-MH

Refer: Silicon Chip Magazine March 2014

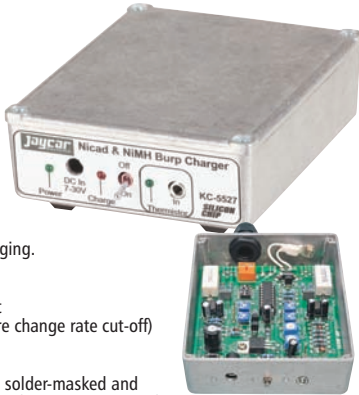
This versatile Ni-Cd and Ni-MH charger can charge one single cell or up to 15 series connected cells (i.e up to 18V).

Features fast charge, top-up, trickle and "burp" charge options. The rapid alternate charge and discharge "burp" process reduces pressure and temperature build-up in the cells, and as a result, increases the charging efficiency. Built-in safeguards include temperature sensing of the cells to prevent overcharging.

Features:

- Adjustable charging time-out
- Adjustable dT/dt (Temperature change rate cut-off)
- Adjustable charge current

Kit supplied with double sided, solder-masked and screen-printed PCB, die-cast case (119 x 94 x 340mm), label and electronic components. Requires a power supply that can supply 1.8V times the number of cells in the battery, max 2.5A.



↑	Cat.	Qty 1 +	Qty 5 +
	KC-5527	\$79.95	\$71.95

SCI-FI KITS

JACOB'S LADDER HIGH VOLTAGE DISPLAY KIT MK2

Refer: Silicon Chip Magazine April 2007

With this kit and the purchase of a 12V ignition coil (available from auto stores and parts recyclers), create an awesome rising ladder of noisy sparks that emits the distinct smell of ozone. This improved circuit is suited to modern high power ignition coils and will deliver a spectacular visual display. Inspired by the good doctor's laboratory in the Frankenstein movie, use this kit for theatre special effects or just to impress your friends.



Kit includes PCB with overlay, pre-cut wire/ladder and all electronic components.

- 12V automotive ignition coil and case not included
- 12V car battery, 7Ah SLA or >5Amp DC power supply required and not included.
- PCB: 170 x 76mm

Warning: The Jacob's Ladder Kit uses potentially dangerous voltage.

↑	Cat.	Qty 1 +	Qty 5 +
	KC-5445	\$47.95	\$42.95

JAYCAR/ELEKTOR SUBSCRIPTION OFFER - 2015

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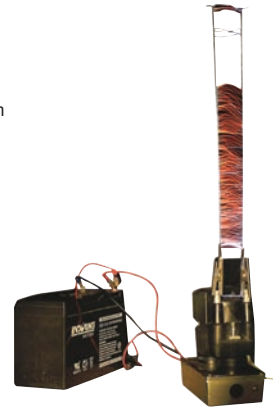
JACOB'S LADDER MK3

Refer: Silicon Chip Magazine February 2013

A spectacular rising ladder of bright and noisy sparks for theatre special effects or to impress your friends. This improved circuit has even more zing and zap than it's previous design from April 2007 and requires the purchase of a VS Commodore 12V ignition coil (available from auto stores and parts recyclers). Kit supplied with silk-screened PCB, diecast enclosure (111 x 60 x 30mm), pre-programmed PIC, PCB mount components and pre-cut wire/ladder.

- Powered from a 12V 7Ah SLA or 12V car battery (Note: Battery not included).

Warning: The Jacob's Ladder Kit uses potentially dangerous voltage.



↑	Cat.	Qty 1 +	Qty 5 +
	KC-5520	\$57.95	\$49.45

SECURITY PROJECTS

INFRARED FLOODLIGHT

Let your CCD camera see in the dark! This infrared light is powered from any 12-14VDC source and uses 32 x infrared LEDs to illuminate an area of up to 5-metres (will vary with light conditions). The PCB measures 56 x 75mm and draws a current of about 300mA.



- Kit is supplied with silkscreened/ gold plated/ solder-masked PCB, 32 x Infrared LEDs and all electronic components. Use our plugpack supply, MP-3282.
- Not suitable for colour CMOS cameras.
- PCB: 74 x 55mm

↑	Cat.	Qty 1 +	Qty 5 +
	KG-9068	\$29.95	\$26.90
	RECOMMENDED BOX - UB3	HB-6013	\$3.95 ea

SILICON CHIP MAGAZINE

GET YOUR SILICON CHIP AT JAYCAR

Silicon Chip is Australia's world-class magazine for the electronics enthusiast. As well as a great range of fun DIY kits, SILICON CHIP has interesting features articles and popular columns such as "Serviceman's Log" and "Circuit Notebook" etc.

Jaycar gets its stock of SILICON CHIP straight off the printing press, so we usually have it a couple of days earlier than the newsagents.

Don't forget to call in to a Jaycar store for the latest issue hot off the press.



↑	Cat.	Qty 1 +
	BE-5025	\$9.95



KIT BACK CATALOGUE - SECURITY KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

Description	Magazine Issue	Cat.	1 +
4 Channel CCTV Switcher	SC 06/01	KC-5316	\$59.95
50 Metre IR Light Barrier	Kwik Kit	KG-9196	\$49.95
Alarm Raucous	SC 01/02	KC-5327	\$29.95
Annunciator Kit	SC 12/05	KC-5420	\$59.95
Driving Light Anti-Theft Kit	SC 09/02	KC-5337	\$19.95
Infrared Detector	Kwik Kit	KG-9086	\$9.95
IR Light Barrier 18 Metre	Kwik Kit	KG-9096	\$39.95
Raucous Alarm	SC 02/02	KC-5327	\$29.95

KIT BACK CATALOGUE - SCI-FI KITS

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see page 54 or 62.

Description	Magazine Issue	Cat.	1 +
RFID Security Module Receiver Kit	SC 06/04	KC-5393	\$89.95
Screacher Car Alarm MKII	EA 01/99	KA-1813	\$29.95
SMS Controller Module	SC 11/04	KC-5400	\$57.95
Swimming Pool Alarm Kit	SC 09/00	KC-5298	\$42.95
Phone Dialler Kit for Burglar Alarms (Modem reqd)	SC 01/03	KC-5348	\$65.00
Jacob's Ladder High Voltage Display MkI	SC 12/95	KC-5191	\$34.95
Starship Enterprise Door Sound Simulator	SC 05/06	KC-5423	\$39.95

TEST EQUIPMENT

USB PORT VOLTAGE CHECKER KIT

Refer: **Silicon Chip Magazine July 2013**

An easy way to test a USB port to see if it is dead, faulty or incorrectly wired to help prevent damaging a valuable USB device you plan to connect. Voltage is indicated using three LEDs. The complete project can be protected using the supplied clear heatshrink tubing. Kit supplied with double sided, soldermasked and screen-printed PCB with SMDs pre-soldered, clear heatshrink, USB connectors and components for USB 2.0 & USB 3.0.

- PCB: 44 x 17mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5522	\$33.95	\$29.45

USB POWER MONITOR KIT

Refer: **Silicon Chip Magazine December 2012**

Plug this kit inline with one USB device to display the current that is drawn at any given time. Check the total power draw from an un-powered hub and its attached devices or what impact a USB device has on your laptop battery life. At the touch of a button the 4-digit LCD panel can display current, voltage or power. It is auto-ranging and will read as low as a few microamps and up to over an amp. It also features display flip-mode, mode memory and digital calibration.

- Measurement modes: current, voltage, power
- Current resolution: 1uA (0-10mA), 1mA (10mA-1A)
- Voltage resolution: 10mV (4.5-5.5V)
- Power resolution: 10uW (0-10mW), 1mW (10mW-1W), 10mW (1-5W)
- Current precision: $\pm 2.5\% \pm 0.1\text{mA}$ (mA range), $\pm 5\% \pm 10\text{uA}$ (uA range)
- Voltage precision: $\pm 2.5\% \pm 10\text{mV}$
- Power precision: $\pm 5\% \pm 0.1\text{mW}$
- Load voltage drop: typically less than 50mV
- Power consumption: 5.3mA/26mW

Kit supplied with double sided, soldermasked and screen-printed PCB with SMDs and pre-programmed micro pre-soldered, LCD screen, and components.

- PCB: 65 x 36mm

↑	Cat.	Qty 1+	Qty 5+
	KC-5516	\$59.95	\$53.95

DIGITAL MULTIMETER KIT

Learn everything there is to know about component recognition and basic electronics with this comprehensive kit. From test leads to solder, everything you need for the construction of this meter is included together with a detailed manual. With test questions and schematic supplied in the manual, the kit can be geared to an individual or class learning environment, making it an excellent choice for first year trade apprentices. Kit includes DMM case, LCD, solder, battery, test leads, PCB, comprehensive 18 page learning manual and electronic components.

- All you'll need is a soldering iron.
- Meter dimensions: 67(W) x 123(H) x 5(D)mm

OBVIOUSLY WE HAVE A HUGE RANGE OF READY TO GO DMMS IN OUR TEST SECTION ON PAGE 148

↑	Cat.	Qty 1+	Qty 5+
	KG-9250	\$24.95	\$22.35

TRANSISTOR TESTER

Refer: **Electronics Australia September 1983**

Have you ever unsoldered a suspect transistor only to find that it checks OK? Troubleshooting exercises are often hindered by this type of false alarm. You can avoid these hassles with the In-Circuit Transistor, SCR and Diode Tester. The kit does just that, test drives WITHOUT the need to unsolder them from the circuit! VERY HANDY! Kit includes a Jiffy box, battery and electronic components and panel showing truth table for device checking.

- PCB: 70 x 57mm



↑	Cat.	Qty 1+	Qty 5+
	KA-1119	\$29.95	\$26.90

CAN'T FIND THE KIT YOU'RE LOOKING FOR?

KIT BACK CATALOGUE

If you can't find what you're looking for, try the Jaycar Kit Back Catalogue. To keep up with the constant flow of new kits and maintain an up to date in-store line-up of projects, older and slow moving kits are returned to our central warehouse. We have included in this catalogue a number of the Kits that form our Back Catalogue. The range is divided up into sections shown at the bottom of the kit pages. In this listing is included a brief description, the reference magazine and issue date of the article, a catalogue reference number and a unit price.

Magazine Icons



Electronics Australia
(EA)



Silicon Chip Magazine
(SC)



Range of easy to assemble
kits (no articles available)
(KK)

Issue is referenced by month then year (MM/YY). If the article ran over several months only the first month is referenced.

DOZENS OF KITS LISTED ON THE BOTTOM OF MOST KIT PAGES



For the absolutely latest list refer to our website
www.jaycar.com.au/kitbackcatalogue

Back catalogue kits are not normally available in Jaycar Stores; you can **ONLY** access information about them on our website.

Three easy ways to order these Kits:

1. Order online at www.jaycar.com.au
2. Call our Free Call Order Hotline on 1800 022 888
3. Use the order form on page 527 and fax it to us

KIT BACK CATALOGUE - TEST KITS

Kits listed here are part of our Kit Back Catalogue. They are not normally available in stores; you can only access information about them on our website.

Description	Magazine	Issue	Cat.	1+
AC/DC Current Clamp Adaptor for Multimeters	SC	09/03	KC-5368	\$34.95
LED Duty Cycle Meter for Fuel Injected Cars	SC Book		KC-5375	\$54.95
Peak-Hold Injector Adaptor	SC Book		KC-5395	\$19.95

KIT BACK CATALOGUE - SHORT CIRCUITS 3

To order visit www.jaycar.com.au, call 1800 022 888 or use the order form at the back of this catalogue. For more information see above.

Description	Magazine	Issue	Cat.	1+
Ultrasonic Water Tank Level Indicator	SC	09/11	KC-5503	\$74.95
Short Circuits 3 #31 Computer Driven Display	SC3		KJ-8112	\$20.95
Instructions for SC Project #31	SC3		KJ-8113	\$2.50

PRE-ASSEMBLED MODULES - AMPLIFIERS

MONO AMPLIFIER MODULE

This tiny module uses the LM386 audio IC, and will deliver 0.5W into 8 ohms from a 9V supply making it ideal for all those basic audio projects. It features variable gain, will happily run from 4-9VDC and is smaller than a 9V battery, allowing it to fit into the tightest of spaces.

Specifications	
Power	4 - 9VDC
Dimensions	65(L) x 35(W) x 20(H)mm

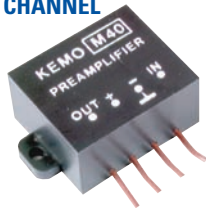


↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0373	\$11.95	\$10.70	\$9.50

UNIVERSAL PREAMPLIFIER MODULE - 1 CHANNEL

For microphones and diverse uses. This mini-module is simply connected between a power amplifier and a weak signal source (e.g. microphone).

Specifications:	
Operating voltage	9 to 24VDC
Frequency response	10Hz to 100kHz
Input	2-50mV
Output	200mV - 1V
Dimensions	30 x 25 x 15mm



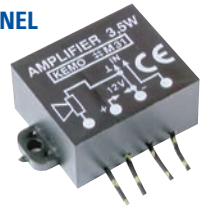
↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0220	\$21.95	\$19.70	\$17.35

UNIVERSAL AMPLIFIER MODULES - 1 CHANNEL

3.5 WATT

Ideal as a bench-test amplifier for audio sources, or even as a mono headphone amplifier, this small audio amplifier can be operated from 4.5 V up to 12 VDC. Use two for stereo.

Specifications:	AA-0223 - 3.5 Watt
Output power:	3.5 W (max)
Operating voltage:	4.5 to 12 V
Speaker impedance:	4-16 ohms
Input sensitivity:	< 80mV
Frequency response:	40Hz-20kHz
Dimensions:	30 x 25 x 15 mm



12 WATT

Small audio amplifier module is suitable for a number of purposes and has a range of suitable input voltages and load impedances.

Specifications:	AA-0225 - 12 Watt
Operating voltage:	6V - 16V, 800mA (max)
Output power:	12W (max) into 4-16 ohms
Frequency range:	40Hz-20kHz
Input sensitivity:	80mV
Dimensions:	62 x 36 x 23mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
3.5W	AA-0223	\$19.95	\$17.70	\$15.70
12W	AA-0225	\$26.95	\$23.95	\$21.35

LET'S GIVE YOU ACCESS TO OVER 11,000 ELECTRONICS ARTICLES & PROJECTS

JAYCAR GOES INTERNATIONAL!

During the course of late 2014 Jaycar spent time with Elektor people working out a deal for Australian/NZ Electronic enthusiasts.

WHAT OR WHO IS ELEKTOR?

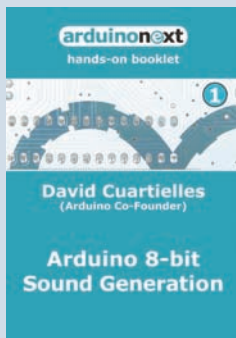
Elektor is an independent Dutch-based electronics magazine that for over 40 years has been producing projects and articles on hard-core electronics subjects. In many ways it is very similar to the old (but now out of print) "Electronics Australia" magazine and nowadays "Silicon Chip". Both Elektor and Silicon Chip have in-house design labs and are both world-class. Jaycar has had an association with Silicon Chip since its inception over 28 years ago. In that time Jaycar has supported hundreds of S.C. projects with kits and specialised components. We pledge to continue with this association.

WHAT ELEKTOR CAN DO FOR YOU

Elektor brings with it a huge and established number of technical contributors (as well as in-house staff) who regularly produce project material, especially projects related to Arduino Embedded Systems. All projects are written and presented in English. By accessing Elektor you are introduced to a library of past and current projects you can only dream of.

JAYCAR/ELEKTOR SUBSCRIPTION OFFER 2015

Also on this page we offer, on behalf of Elektor, a subscription deal for an on-line version of their magazine. If you take out a one year GREEN Membership you pay only A\$36.50 (approx.)*. That's only 10 cents per day and a discount of 66% on the regular subscription price of A\$110. With it you get a free booklet written by one of the co-founders of Arduino, David Cuatrecasas called "Arduino Sound Generation". We have bargained with Elektor for the best possible deal. Jaycar makes no commission on this. It's a service to you.



Free with subscription

* Please note that currency conversion is applied from GBP according to your location. Payment will be in GBP.

If you take the 12-month subscription, you also get access to the collection of over 273 magazines in the back-catalogue library which contains over 11,000 (yes, 11 thousand) articles and projects. You also have free access to Elektor-Labs.com where you can share in upcoming projects. You can even submit your own projects which may be submitted for publication in Elektor. How prestigious. Elektor has huge readership in Europe and the USA. P.S. There are 50, yes 50 new DIY projects planned for 2015.

You subscribe directly with Elektor as we make no money out of this. You can get a one-year on-line subscription to the Elektor magazine (minimum 132 pages in PDF format).



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WHY WE ARE DOING IT?

Jaycar is doing it as a service to our customers to further interest and development in embedded systems, especially Arduino®.

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PRE-ASSEMBLED MODULES - DC-DC CONVERTERS

MULTI-VOLTAGE REGULATED ADAPTOR MODULE (STEPDOWN)

This module is a low-powered DC converter for many applications, for example, where you need a reliable voltage source for a portable CD player or similar battery-powered device. Another use for this adaptor is for a peripheral computer power supply to power external Blu-Ray drive, powered speakers, modems, etc. Just plug its input into your PC's internal power supply cable and get selectable regulated voltage out from 3 to 15VDC*. Output current capability is around 1.5 amps. All in all, quite a handy little module!

- Dimensions: 63(L) x 24(Dia.)mm

Note: *Input voltage MUST be larger than the required output voltage

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0372	\$9.95	\$8.75	\$7.75



PRE-ASSEMBLED REDUCER MODULE

3 AMP 24V TO 12V REDUCER

Many trucks and boats use 24V systems. These converters will allow you to run a reasonably sized 12V car-stereo or other devices from a 24V supply. Heatsink (not included) should be used for superior performance.

Specifications	
Short-circuit protection	Thermal cutout.
Input voltage	24 to 26VDC
Output voltage	12VDC
Maximum load	3A
Dimensions	135(L) x 50(W) x 24(H)mm
Heatsink	50 x 100 x 30mm (rec. size) use Cat. HH-8572 or similar



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0266	\$29.95	\$26.90	\$23.70

PRE-ASSEMBLED MODULES - CARS

BATTERY DISCHARGE PROTECTOR

Protects your car battery from total discharge by switching off appliances such as fridges and TV sets before the battery voltage drops to an unrecoverable level. When battery voltage is re-established by recharging, it switches appliances on automatically. The interrupting voltage is adjustable from 10.4 to 13.3 VDC. Essential low-cost insurance if you have a dual battery setup in a boat, 4WD, RV or for an alternative energy system such as solar or wind power.

Specifications	
Operating voltage	12VDC
Max. switching current	20A
Interrupting voltage	10.4 - 13.3VDC
Resetting voltage	approx. 0.8V (+/-0.3V) above interrupt voltage
Current consumption	< 0.7mA when OFF, < 1.6mA when ON
Dimensions	87(L) x 60(W) x 32(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0262	\$43.95	\$38.45	\$34.95

+ FUEL MIXTURE DISPLAY & AUTOMOTIVE LED DISPLAY MODULES ON PAGE 231

SPEEDO CORRECTOR MODULE FOR CARS

When you modify your gearbox, diff ratio or change to a large circumference tyre, it may result in an inaccurate speedometer. This module alters the speedometer signal up or down from 0% to 99% of the original signal. With this improved model, the input setup selection can be automatically selected and it also features an LED indicator to show when the input signal is being received.

Specifications	
Power	12VDC
Dimensions	63(L) x 46(W) x 25(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0376	\$44.95	\$40.45	\$35.90

FREQUENCY RELAY MODULE FOR CARS

This module can be adapted to suit a range of different applications. It uses a standard tach, road speed, or many other pulse outputs to switch a relay. The switch frequency can be set to trip when it is rising or falling, and it features adjustable hysteresis (the difference between trigger on/off frequency). You could configure it to trigger water spray cooling on deceleration, shift light activation, adjustable aerodynamics based on speed, intake manifold switching and much more.

- Dimensions: 72(L) x 65(W) x 43(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0377	\$39.95	\$35.90	\$31.90

PRE-ASSEMBLED MODULES - GENERAL

MAINS MOTOR & LAMP CONTROLLER

This module can be used for various mains rated applications including lamp dimming, soldering iron temperature adjustment and collector or split-pole motor speed control. Features a 600W continuous and 1200W peak loading capacity with adjustable potentiometer control. Please note: fluorescent, quartz and energy saving lamps, and motors with starting capacitors should not be used with this module.

- Knob included.

Specifications:	
Continuous power	600W
Maximum power	1200W
Dimensions	62 x 35 x 21 mm



Please note that this kit operates on 240VAC mains voltage and you should be extremely careful when using these voltages. If in doubt, have an electrician check your work before applying power.

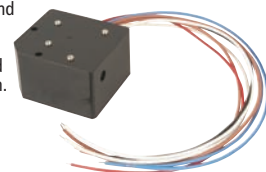
↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	AA-0346	\$39.95	\$35.90	\$31.90

PRE-ASSEMBLED MODULES - SENSORS & TIMERS

PROGRAMMABLE INTERVAL 12V TIMER MODULE

An easily programmed low cost electronic timer. It operates from 12VDC, with low current drain: <50mA when relay is on, <5mA when relay is off. It is link programmed for either a single ON timing period, or continuous ON/OFF cycling and can be link programmed for any of 48 different time periods, separately for ON time and OFF time. Selectable periods are 1/2/3/4/5/6/7/8/10/20/30/40/50/60/70/80 seconds, minutes and hours. It may be restarted at any time simply by pressing reset pushbutton.

Specifications	
Power	12VDC
Dimensions	72(L) x 65(W) x 43(H)mm



↑	Cat.	Qty 1+	Qty 4+
	AA-0378	\$37.95	\$33.95

12V 3A TIMER MODULE 2 SECONDS TO 23 MINUTES

A versatile and useful timer module that can be set for periods of 2 seconds to 23 minutes. The start and stop functions are controlled by simple switch inputs and the relay output can control a device of up to 25V 3A.

Specifications	
Operating voltage	12 - 15VDC
Current consumption	20mA/80mA (Relay off/on)
Relay point	Single pole, 25VDC, 3A
Time adjustment	2 sec to 23 min (+/-30%)
Dimensions	87(L) x 60(W) x 33(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0364	\$37.95	\$33.95	\$30.45

12 VOLT TWILIGHT SWITCH

This handy module senses the ambient light level and will switch external devices on/off at night and in the morning. The unit operates from 12VDC and its changeover contacts are rated at 25VDC @ 3A. Power consumption is only 2mA so it is ideal for automotive or battery-driven applications. Use it for garden lighting or security applications etc.

- Supplied fully assembled and tested.
- Dimensions: 72(L) x 50(W) x 32(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	AA-0323	\$27.95	\$24.95	\$22.35

PRE-ASSEMBLED MODULES - TESTERS

LED TESTER

With this basic but essential tool it is possible to check the function, brightness, colour and polarity of most kinds of light emitting diodes (LED). The LED to be tested plugs into the front panel, at the current you wish to test it with. Two 10mA positions have been included on this multi-LED tester so that comparisons between two LEDs can be made simultaneously.

Specifications	
Operating voltage	9V battery required
Test currents	1mA, 2.5mA, 5mA, 10mA, 20mA, 50mA
Dimensions	58(L) x 44(W) x 25(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0274	\$13.95	\$12.35	\$10.95

LET'S POINT YOU TO THE RIGHT PAGE...

Components

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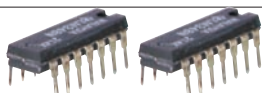
PASSIVE COMPONENTS

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LINEAR ICs

THROUGH HOLE

- Major brands only



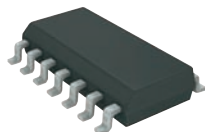
Type	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
AN7511	8	Balanced transformerless audio amp 1W	ZL-3388	\$2.95	\$2.60	\$2.00
BA1404	18	FM stereo transmitter	ZL-3995	\$5.95	\$5.25	\$4.15
CA3140	8	4.5MHz BiMOS op-amp	ZL-3835	\$3.75	\$3.30	\$2.60
CA3130	8	15MHz BiMOS op-amp	ZL-3860	\$4.95	\$4.45	\$3.45
INA126PA	8	Micropower Instrument Amp	ZL-3976	\$6.50	\$5.75	\$4.45
LM301	8	High performance op-amp	ZL-3301	\$2.25	\$2.00	\$1.55
LM308	8	Precision op-amp	ZL-3308	\$12.95	\$11.35	\$8.95
LM311	8	Voltage comparator	ZL-3311	\$1.95	\$1.75	\$1.35
LM319	14	High speed dual comparator	ZL-3319	\$3.75	\$3.30	\$2.60
LM324	14	Quad low power op-amp	ZL-3324	\$2.35	\$2.09	\$1.60
LM334Z	3	Adjustable current source	ZL-3334	\$2.75	\$2.45	\$1.90
LM335Z	3	Temperature sensor TO92	ZL-3336	\$4.50	\$3.95	\$3.15
LM339	14	Quad low power comparator	ZL-3339	\$1.95	\$1.75	\$1.35
LM348	14	Quad 741 op-amp	ZL-3348	\$2.75	\$2.45	\$1.90
LM358	8	Dual low power op-amp	ZL-3358	\$2.25	\$2.00	\$1.55
LM380	14	Audio power amp 2.5W	ZL-3380	\$3.45	\$3.05	\$2.35
LM386N-1	8	Low voltage audio amp 325mW	ZL-3386	\$2.75	\$2.45	\$1.90
LM393	8	Low power dual comparator	ZL-3393	\$2.25	\$2.00	\$1.55
LM567	8	Low power tone decoder	ZL-3567	\$3.75	\$3.30	\$2.60
LM741	8	General purpose op-amp	ZL-3741	\$1.95	\$1.75	\$1.35

Type	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
LM747	14	Dual op-amp	ZL-3747	\$5.50	\$4.90	\$3.75
LM833N	8	Dual low noise opamp	ZL-3833	\$3.20	\$2.83	\$2.20
LM1458	8	Dual op-amp	ZL-3753	\$1.75	\$1.55	\$1.20
LM1875	5	25W audio power amplifier	ZL-3755	\$6.50	\$5.75	\$4.45
LM2917	14	Frequency to voltage convertor	ZL-3930	\$6.50	\$5.75	\$4.45
LM3875T	11	56W audio power amplifier	ZL-3752	\$18.95	\$16.95	\$12.95
LM3876	11	56W audio power amplifier + mute	ZL-3756	\$18.95	\$16.95	\$12.95
LM3900	14	Quad op-amp	ZL-3900	\$2.75	\$2.45	\$1.90
LM3914	18	LED bar/dot driver (linear)	ZL-3914	\$8.25	\$7.25	\$5.75
LM3915	18	LED bar/dot driver (logarithmic)	ZL-3915	\$8.25	\$7.25	\$5.75
LM4136	14	Quad high performance op-amp	ZL-3936	\$2.80	\$2.45	\$1.90
LM4558	8	Dual high performance op-amp	ZL-3958	\$1.75	\$1.55	\$1.20
LM7555	8	CMOS timer	ZL-3455	\$2.15	\$1.85	\$1.25
LMC6482AIN	8	Dual CMOS op-amp	ZL-3482	\$5.50	\$4.90	\$3.75
LMC6484AIN	14	Quad CMOS op-amp	ZL-3484	\$7.95	\$7.10	\$5.50
NE555	8	555 timer	ZL-3555	\$1.50	\$1.35	\$1.05
NE556	14	Dual 555 timer	ZL-3556	\$1.95	\$1.75	\$1.35
NE5534N	8	Low noise op-amp	ZL-3970	\$3.95	\$3.50	\$2.75
NE5534AN	8	Ultra low noise op-amp	ZL-3971	\$4.85	\$4.30	\$3.30
OP07C/D	8	Precision op-amp	ZL-3974	\$4.75	\$4.25	\$3.30
OPA2134PA	8	Dual high perf audio op-amp	ZL-3972	\$8.95	\$7.95	\$6.25
TL071/LF351	8	Single low noise JFET op-amp	ZL-3071	\$2.15	\$1.90	\$1.50
TL072/LF353	8	Dual low noise JFET op-amp	ZL-3072	\$2.15	\$1.90	\$1.50
TL074/LF347	14	Quad low noise JFET op-amp	ZL-3074	\$2.75	\$2.45	\$1.90
TL084	14	Quad JFET op-amp	ZL-3084	\$2.50	\$2.20	\$1.75

SMD LINEAR ICs

SMD op-amp ICs for audio applications.

- Packs of 10



SMD

Type	Case	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
LM324M	SOIC14	Quad low power op-amp	ZL-3342	\$29.95	\$26.90	\$20.70
μA741CD	SOIC8	General purpose op-amp	ZL-3070	\$9.95		

SMD 555 & 556 DUAL TIMER ICs

- Timing from microseconds through hours
- Operates in both astable and monostable modes
- Adjustable duty cycle
- Output can source or sink 200mA
- Output and supply TTL compatible
- Normally on and normally off output
- Sold as a pack of 10

Applications:

- Timing
- Pulse generation
- Time delay generation
- Pulse width modulation
- Pulse position modulation
- Linear ramp generator



SMD

Type	Case	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
NE555D	SOIC8	555 timer	ZL-3550	\$13.95	\$12.35	\$9.75
NE556D	SOIC14	Dual 555 timer	ZL-3558	\$9.95		

LET'S FIND EVERYTHING YOU NEED!

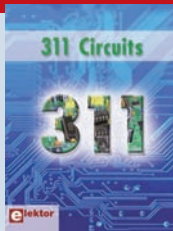
311 CIRCUITS

311 Circuits - is the twelfth book in Elektor's celebrated '300' series. Containing circuits, design ideas, tips and tricks for all areas of electronics. Including: Audio, video, computers, microcontrollers, radio, power supplies, batteries, testing, measurement and software. Not to mention the "miscellaneous" section, a veritable goldmine of inspiration.

Compiled from the 2009, 2010 and 2011 Summer Circuits double editions of Elektor magazine, it is mostly based on readers' contributions, supplemented by circuits engineered and developed in the Elektor Labs. If you only own one electronics book, this should be it.

NEW 2015

BOOK



↑	Cat.	Qty 1+
Softcover, 420 pages, 234(L) x 170(W) x 24(H)mm	BM-2471	\$49.95

309 CIRCUITS BOOK

Companion to the popular 308 circuits with many useful designs in audio, video, car, computer, hobby, home, test, power supplies, chargers and more. The book is divided into categories to help find circuits easier. Each circuit has a diagram and a photo of the finished project.

BOOK



↑	Cat.	Qty 1+
Soft cover, 428 pages, 240 x 184mm	BM-2470	\$34.95

TECH TALK

WHAT IS AN ARM MICROPROCESSOR/MICROCONTROLLER?

The term ARM stands for Advanced Risc Machine.

The first manufacturer to describe their micro product in this way was, we think, AT&T. The processor is quite sophisticated, as it runs 32-bit architecture. The ARM concept has proven to be popular and many manufacturers produce ARM-like devices. Indeed the Arduino uses an ARM- type processor.

RISC Normally a 32-bit architecture would require a massive internal instruction set to manage the operation of the device. The problem is, a complex instruction set shows the speed of the machine significantly.

Some time ago, some clever engineers realised that reducing the actual instruction set down to a minimum increased the processing speed performance out of all proportion to the marginal ambiguities that a large, complex instruction set was meant to eliminate.

So, to repeat, an ARM processor is a very powerful 32-bit machine that is very, very fast for its cost. With 32-bit architecture "Embedded" (See what does "Embedded System" mean?) platforms have revolutionized what can be done with small, low-power Do-it-yourself circuits.

74LS SERIES

- Low power Schottky logic
- Major brands only



Type	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
74LS00	14	Quad 2 input NAND gate	ZS-5000	\$0.68	\$0.61	\$0.48
74LS01	14	Quad 2 input NAND gate (OC)	ZS-5001	\$0.68	\$0.61	\$0.48
74LS02	14	Quad 2 input NOR gate	ZS-5002	\$0.85	\$0.77	\$0.60
74LS04	14	Hex inverter	ZS-5004	\$0.68	\$0.61	\$0.48
74LS05	14	Hex inverter (OC)	ZS-5005	\$0.68	\$0.61	\$0.48
74LS08	14	Quad 2 input AND gate	ZS-5008	\$0.95	\$0.85	\$0.65
74LS10	14	Triple 3 input NAND gate	ZS-5010	\$1.25	\$1.10	\$0.85
74LS11	14	Triple 3 input AND gate	ZS-5011	\$1.25	\$1.10	\$0.85
74LS14	14	Hex schmitt trigger inverter	ZS-5014	\$1.15	\$1.00	\$0.80
74LS20	14	Dual 4 input NAND gate	ZS-5020	\$0.95	\$0.85	\$0.65
74LS27	14	Triple 3 input NOR gate	ZS-5027	\$0.95	\$0.85	\$0.65
74LS30	14	Single 8 input NAND gate	ZS-5030	\$0.95	\$0.85	\$0.65
74LS32	14	Quad 2 input OR gate	ZS-5032	\$0.95	\$0.85	\$0.65
74LS42	16	BCD to decimal decoder	ZS-5042	\$2.10	\$1.85	\$1.40
74LS47	16	BCD to 7 seg decoder/driver (OC)	ZS-5047	\$1.95	\$1.75	\$1.35
74LS48	16	BCD to 7 segment decoder	ZS-5048	\$2.85	\$2.53	\$1.95
74LS73	14	Dual JK flip-flop + clear	ZS-5073	\$2.15	\$1.90	\$1.50
74LS74	14	Dual D flip-flop + preset + clear	ZS-5074	\$1.50	\$1.35	\$1.05
74LS75	16	4 bit bi-stable latch	ZS-5075	\$1.75	\$1.55	\$1.20
74LS76	16	Dual JK flip-flop + preset + clear	ZS-5076	\$3.25	\$2.90	\$2.25
74LS85	16	4 bit magnitude comparator	ZS-5085	\$1.95	\$1.75	\$1.35
74LS86	14	Quad 2 input exclusive OR gate	ZS-5086	\$1.40	\$1.25	\$0.95

Type	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
74LS90	14	Decade counter	ZS-5090	\$1.85	\$1.65	\$1.25
74LS93	14	4 bit binary counter	ZS-5093	\$2.50	\$2.20	\$1.75
74LS109	16	Dual JK flip-flop + preset + clear	ZS-5109	\$1.40	\$1.25	\$0.95
74LS123	16	Dual retrigger monostable with clear	ZS-5123	\$1.95	\$1.75	\$1.35
74LS125	14	Quad tri-state buffer	ZS-5125	\$1.75	\$1.55	\$1.40
74LS138	16	3 to 8 line decoder/demux	ZS-5138	\$1.70	\$1.50	\$1.15
74LS139	16	Dual 2 to 4 line decoder/demux	ZS-5139	\$1.15	\$1.00	\$0.80
74LS151	16	Single 8 input multiplexer	ZS-5151	\$1.95	\$1.75	\$1.35
74LS153	16	Dual 4 input multiplexer	ZS-5153	\$1.75	\$1.55	\$1.20
74LS155	16	Dual 2 to 4 line decoder/demux	ZS-5155	\$2.50	\$2.20	\$1.75
74LS157	16	Quad 2 to 1 line multiplexer	ZS-5157	\$1.45	\$1.30	\$1.15
74LS161	16	4 bit binary counter (async. reset)	ZS-5161	\$1.75	\$1.55	\$1.20
74LS164	14	8 bit shift register (ser. in/par. out)	ZS-5164	\$1.45	\$1.30	\$0.99
74LS174	16	Hex D flip-flop + clear	ZS-5174	\$1.95	\$1.75	\$1.55
74LS175	16	Quad D flip-flop with clear	ZS-5175	\$1.30	\$1.15	\$0.90
74LS192	16	Up/down dec counter/dual clock	ZS-5192	\$2.50	\$2.20	\$1.75
74LS193	16	Up/down bin counter/dual clock	ZS-5193	\$1.75	\$1.55	\$1.20
74LS221	16	Dual monostable multivibrator	ZS-5221	\$1.80	\$1.55	\$1.25
74LS240	20	Octal tri-state buffer (inverting)	ZS-5240	\$1.50	\$1.35	\$1.05
74LS241	20	Octal tri-state buffer (non-inverting)	ZS-5241	\$2.15	\$1.90	\$1.50
74LS244	20	Octal tri-state buffer (non-inverting)	ZS-5244	\$2.15	\$1.90	\$1.50
74LS245	20	Octal tri-state bus transceiver	ZS-5245	\$2.15	\$1.90	\$1.50
74LS273	20	Octal D flip-flop + clear	ZS-5273	\$2.50	\$2.20	\$1.75
74LS283	16	4 bit binary full adder + carry	ZS-5283	\$2.15	\$1.90	\$1.50
74LS373	20	Octal tri-state transparent latch	ZS-5273	\$1.75	\$1.55	\$1.20
74LS374	20	Octal tri-state D flip-flop	ZS-5274	\$1.75	\$1.55	\$1.20

74HC SERIES

- High speed CMOS logic
- Major brands only

Type	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
74HC00	14	Quad 2 input NAND gate	ZC-4800	\$1.15	\$0.95	\$0.65
74HC02	14	Quad 2 input NOR gate	ZC-4802	\$1.35	\$1.15	\$0.80
74HC04	14	Hex inverter	ZC-4804	\$1.35	\$1.15	\$0.80
74HC08	14	Quad 2 input AND gate	ZC-4808	\$1.35	\$1.15	\$0.80
74HC10	14	Triple 3 input NAND gate	ZC-4810	\$1.35	\$1.15	\$0.80
74HC14	14	Hex schmitt trig inverter	ZC-4821	\$1.35	\$1.15	\$0.80
74HC27	14	Triple 3 input NOR gate	ZC-4827	\$1.35	\$1.15	\$0.80
74HC30	14	8 input NAND gate	ZC-4811	\$1.35	\$1.15	\$0.80
74HC32	14	Quad 2 input OR gate	ZC-4823	\$1.35	\$1.15	\$0.80
74HC42	16	BCD to decimal decoder	ZC-4826	\$2.75	\$2.35	\$1.65
74HC51	14	Dual 2 wide/2 input, 2 wide/3 input AND-OR-INVERT gate	ZC-4828	\$2.15	\$1.85	\$1.25
74HC73	14	Dual JK flip-flop + clear	ZC-4829	\$2.15	\$1.85	\$1.25
74HC74	14	Dual D flip-flop + preset + clear	ZC-4830	\$1.25	\$1.05	\$0.75
74HC76	16	Dual JK flip-flop + preset + clear	ZC-4832	\$2.15	\$1.85	\$1.25
74HC85	16	4 bit magnitude comparator	ZC-4834	\$2.15	\$1.85	\$1.25
74HC86	14	Quad 2 input exclusive OR gates	ZC-4835	\$1.50	\$1.30	\$0.90
74HC107	14	Dual JK flip-flop + clear	ZC-4837	\$2.95	\$2.55	\$1.75
74HC123	16	Dual retrigger monostable multivibrator + clear	ZC-4840	\$2.15	\$1.85	\$1.25
74HC125	14	Quad tri-state buffer (non-inverting)	ZC-4842	\$1.95	\$1.65	\$1.15
74HC132	14	Quad 2 input NAND gate + schmitt trig	ZC-4844	\$1.95	\$1.65	\$1.15

Type	Pins	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
74HC138	16	3 to 8 line decoder/demux	ZC-4846	\$2.15	\$1.85	\$1.25
74HC139	16	Dual 2 to 4 line decoder/demux	ZC-4848	\$2.15	\$1.85	\$1.25
74HC151	16	8 to 1 line multiplexer	ZC-4849	\$2.15	\$1.85	\$1.25
74HC154	24	4 to 16 line decoder/demux	ZC-4850	\$3.85	\$3.35	\$2.25
74HC157	16	Quad 2 line to 1 line multiplexer	ZC-4853	\$1.75	\$1.50	\$1.05
74HC160	16	Synch 4 bit BCD counter + preset	ZC-4855	\$2.75	\$2.35	\$1.65
74HC161	16	Synch 4 bit binary counter + preset	ZC-4856	\$2.65	\$2.30	\$1.55
74HC164	14	8 bit ser-in/par-out shift reg	ZC-4857	\$1.75	\$1.50	\$1.05
74HC165	16	8 bit par-in/ser-out shift reg	ZC-4858	\$1.75	\$1.50	\$1.05
74HC174	16	Hex D flip-flop + clear	ZC-4862	\$1.75	\$1.50	\$1.05
74HC193	16	Synch 4 bit binary up/down counter	ZC-4864	\$1.95	\$1.65	\$1.15
74HC221	16	Dual monostable multivibrator	ZC-4865	\$3.25	\$2.80	\$1.90
74HC240	20	Octal tri-state buffer (inverting)	ZC-4867	\$2.85	\$2.45	\$1.70
74HC244	20	Octal tri-state buffer (non-inverting)	ZC-4869	\$1.95	\$1.65	\$1.15
74HC245	20	Octal tri-state transceiver	ZC-4870	\$1.95	\$1.65	\$1.15
74HC367	16	Hex tri-state buffer	ZC-4872	\$2.15	\$1.85	\$1.25
74HC373	20	Octal tri-state transparent latch	ZC-4874	\$1.95	\$1.65	\$1.15
74HC374	20	Octal tri-state D flip-flop	ZC-4875	\$2.15	\$1.85	\$1.25
74HC393	14	Dual 4 bit binary counter	ZC-4880	\$2.50	\$2.20	\$1.75
74HC573	20	Octal tri-state transparent D latch	ZC-4890	\$2.85	\$2.45	\$1.70
74HC595	16	8 bit tri-state ser-in/ser+ par-out shift reg	ZC-4895	\$3.35	\$2.90	\$1.95
74HC4066	14	Quad bilateral analog switch	ZC-4892	\$1.15	\$0.95	\$0.65

TTL SERIES

- Standard TTL logic
- Major brands only



Type	Pin	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
7404	14	Hex inverter	ZS-5804	\$2.95	\$2.55	\$1.75
7405	14	Hex inverter with OC outputs	ZL-3405	\$2.95	\$2.55	\$1.75
7406	14	Hex inverter with 30V OC outputs	ZS-5806	\$2.95	\$2.55	\$1.75
7407	14	Hex buffer with 30V OC outputs	ZS-5807	\$1.65	\$1.40	\$0.95

NON-STATIC SHEETING

CONDUCTIVE FOAM

Non-static sheeting for storing CMOS, ICs, LSIs, etc.

- Will store up to 150 ICs on one sheet
- Reusable.
- Size 225x150mm.
- Can be cut with scissors or hobby knife for smaller pieces

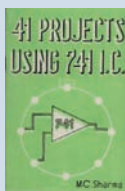


	Cat.	Qty 1+	Qty 3+	Qty 6+
↑	ZV-9998	\$9.95	\$8.75	\$6.75

LET'S FIND EVERYTHING YOU NEED!

41 PROJECTS USING 741 IC

By M C Sharma. The 741 OP amp IC is very inexpensive yet is comparable to the best in respect of versatility and performance. We can't list every one of the 41 kits but here are a few examples: inverting and non-inverting AC and DC amps, crystal, magnetic, guitar, telephone and mic preamps, 3W and 12W amps, intercom, AC and DC motor control, schmitt trigger, square wave generator, flasher, timer light op relay, DC voltmeter, AC millivoltmeter, RPM counter, A to D converter, etc.



BOOK

↑	Cat.	Qty 1+
	Soft cover, 37 pages 140 x 210mm BM-2430	\$7.50

555 TIMER & ITS APPLICATIONS

The 555 Timer IC is probably the most used IC in the world. It gives accurate timing range of micro seconds to hours. This book describes the functions and operation of the 555, then explains 21 projects to build using the IC. Some of these include photo timer, touch plate controller, car wiper control, car lights turn off, flashers, generators, delays auto power on and off, Ni-Cd charger, frequency divider, light operated relay, etc. An ideal book for the electronic hobbyist and experimenter.



BOOK

↑	Cat.	Qty 1+
	Soft cover, 43 pages 138 x 208mm BM-2466	\$7.00



CMOS SERIES

- Standard CMOS logic
- Major brands only

Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
4001	14	Quad 2 input NOR gate	ZC-4001	\$1.15	\$0.95	\$0.65
4007	14	Dual comp pair plus inverter	ZC-4007	\$1.35	\$1.15	\$0.80
4009	16	Hex buffer (inverting)	ZC-4009	\$1.75	\$1.50	\$1.05
4011	14	Quad 2 input NAND gate	ZC-4011	\$1.15	\$0.95	\$0.65
4012	14	Dual 4 input NAND Gate	ZC-4012	\$1.15	\$0.95	\$0.65
4013	14	Dual D flip-flop	ZC-4013	\$1.15	\$0.95	\$0.65
4015	16	Dual 4 bit static shift register	ZC-4015	\$1.75	\$1.50	\$1.05
4016	14	Quad bi-lateral switch	ZC-4016	\$1.15	\$0.95	\$0.65
4017	16	Decade counter/divider	ZC-4017	\$1.15	\$0.95	\$0.65
4018	16	Presetable divide by N counter	ZC-4018	\$2.75	\$2.35	\$1.65
4020	16	14-stage ripple carry binary counter	ZC-4020	\$1.95	\$1.65	\$1.15
4021	16	8-stage static shift register	ZC-4021	\$1.95	\$1.65	\$1.15
4022	16	Divide-by-8 counter/divider	ZC-4022	\$1.95	\$1.65	\$1.15
4023	14	Triple 3 input NAND gate	ZC-4023	\$1.25	\$1.05	\$0.75
4024	14	7-stage ripple carry binary counter	ZC-4024	\$1.25	\$1.05	\$0.75
4025	14	Triple 3-input NOR gate	ZC-4025	\$1.25	\$1.05	\$0.75
4026	16	Decade counter with 7 segment output	ZC-4026	\$2.45	\$2.10	\$1.45
4027	16	Dual JK flip-flop	ZC-4027	\$1.15	\$0.95	\$0.65
4028	16	BCD-to-Decimal Decoder	ZC-4028	\$1.15	\$0.95	\$0.65
4029	16	Presetable bin/decade up/down cnt	ZC-4029	\$1.75	\$1.50	\$1.05
4030	14	Quad 2 input exclusive OR gate	ZC-4030	\$1.75	\$1.50	\$1.05
4040	16	12-stage ripple carry binary counter	ZC-4040	\$1.75	\$1.50	\$1.05
4046	16	Micropower phase locked loop (PLL)	ZC-4046	\$1.95	\$1.65	\$1.15
4047	14	Monostable/Astable multivibrator	ZC-4047	\$2.15	\$1.85	\$1.25
4049	16	Hex buffer (inverting)	ZC-4049	\$1.15	\$0.95	\$0.65
4050	16	Hex buffer (non-inverting)	ZC-4050	\$1.15	\$0.95	\$0.65
4051	16	Single 8 channel analog mux/demux	ZC-4051	\$1.75	\$1.50	\$1.05

Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
4052	16	Dual 4 channel analog mux/demux	ZC-4052	\$1.15	\$0.95	\$0.65
4053	16	Triple 2 channel analog mux/demux	ZC-4053	\$1.75	\$1.50	\$1.05
4056	16	BCD to 7seg LCD decoder/driver	ZC-4056	\$2.75	\$2.35	\$1.65
4060	16	14-stage ripple carry binary counter	ZC-4060	\$1.75	\$1.50	\$1.05
4066	14	Quad bi-lateral switch	ZC-4066	\$1.15	\$0.95	\$0.65
4069	14	Hex inverter	ZC-4069	\$1.15	\$0.95	\$0.65
4070	14	Quad 2 input exclusive OR gate	ZC-4070	\$1.15	\$0.95	\$0.65
4071	14	Quad 2 input OR gate	ZC-4071	\$1.15	\$0.95	\$0.65
4073	14	Triple 3 input AND gate	ZC-4073	\$1.15	\$0.95	\$0.65
4075	14	Triple 3 input OR gate	ZC-4075	\$1.75	\$1.50	\$1.05
4076	16	4 bit tri-state D-type register	ZC-4076	\$1.75	\$1.50	\$1.05
4077	14	Quad 2 input exclusive NOR gate	ZC-4077	\$1.75	\$1.50	\$1.05
4081	14	Quad 2 input AND gate	ZC-4081	\$1.25	\$1.05	\$0.75
4093	14	Quad 2 input NAND schmitt trigger	ZC-4093	\$1.65	\$1.40	\$0.95
4094	16	8-bit tri-state shift register/latch	ZC-4094	\$1.65	\$1.40	\$0.95
40106	14	Hex schmitt trigger (inverting)	ZC-4914	\$1.75	\$1.50	\$1.05
4502	16	Strobed hex tri-state inverter	ZC-4502	\$2.15	\$1.85	\$1.25
4510	16	BCD up/down counter + preset	ZC-4510	\$1.95	\$1.65	\$1.15
4511	16	BCD to 7seg decoder/driver	ZC-4511	\$1.95	\$1.65	\$1.15
4514	24	4-bit latched 4 to 16 line decoder	ZC-4514	\$4.95	\$4.30	\$2.90
4516	16	Binary up/down counter + preset	ZC-4516	\$2.65	\$2.30	\$1.55
4518	16	Dual BCD up counter	ZC-4518	\$2.15	\$1.85	\$1.25
4520	16	Dual binary up counter	ZC-4520	\$1.95	\$1.65	\$1.15
4528	16	Dual monostable multivibrator	ZC-4528	\$1.50	\$1.25	\$0.90
4538	16	Dual precision monostable multivibrator	ZC-4538	\$2.65	\$2.30	\$1.55
4543	16	BCD to 7seg LCD latch/decoder/driver	ZC-4543	\$1.75	\$1.50	\$1.05
4553	16	3 digit BCD counter	ZC-4553	\$4.95	\$4.30	\$2.90

MICROCONTROLLER - ATMEL

ATMEL MICROCONTROLLERS



Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
AT89C2051-24PC	20	8 bit micro + 2kB flash memory	ZZ-8700	\$4.70	\$4.15	\$3.15
AT90S2313-10PC	20	8 bit micro + 2kB flash memory	ZZ-8710	\$9.70	\$8.50	\$6.75
AT90S1200-12PC	20	8 bit micro + 1kB flash memory	ZZ-8750	\$10.20	\$8.75	\$6.75
ATmega8535-16PU	40	8 bit micro + 8kB flash memory	ZZ-8742	\$14.95	\$13.35	\$10.35
ATmega16-8PC	40	8 bit micro + 16kB flash memory	ZZ-8755	\$19.95	\$17.70	\$13.70
ATmega32-8PC-16PU	40	8 bit micro + 32kB flash memory	ZZ-8760	\$21.95	\$19.70	\$15.25
ATmega8515-8PC	40	8 bit micro + 8kB flash memory	ZZ-8765	\$9.95	\$8.75	\$6.75

ATMEGA AVR RISC MICROCONTROLLERS - 16MHZ

Atmel's AVR microcontrollers utilise their famous RISC core operating at market leading speeds to make some of the best microcontroller products available. Architecture engineered for working with compiled C language programs, there is no longer a need for assembly language or a need for inefficient and unwieldy BASIC, so you can develop your project quicker without having to learn a new language.



- Includes 16MHz crystal oscillator
- 23 programmable I/O lines
- 6-channel ADC
- 0 - 4MHz @ 1.8 - 5.5V,
- 0 - 10MHz @ 2.7 - 5.5V,
- 0 - 20MHz @ 4.5 - 5.5V
- 28-pin DIP format for easy use in breadboards or Arduino compatible boards



Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
ATmega8-16PI	28	8 bit micro + 8kB flash memory	ZZ-8753	\$8.95	\$7.95	\$6.25
ATmega128-16AI	TQFP64	8 bit micro + 128kB flash memory	ZZ-8770	\$29.95	\$26.90	\$20.70
ATmega162-16PI	40	8 bit micro + 16kB flash memory	ZZ-8772	\$22.95	\$20.35	\$15.95

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZZ-8726	\$12.95	\$11.35	\$8.95

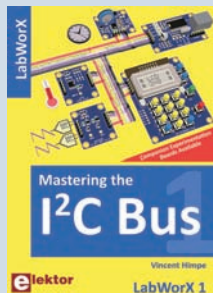
LET'S FIND EVERYTHING YOU NEED!

MASTERING THE I2C BUS

This book takes you on an exploratory journey of the I²C Bus and its applications. In addition to the Bus protocol, focus is given to practical applications and solid design technique. Full of helpful tips and tricks, this book works equally well as an Introductory guide and as a workshop handbook.

- Soft cover, 250 pages.
- 235 x 170 x 14mm

NEW
2015



BOOK

↑	Cat.	Qty 1+
	BT-1386	\$49.95

TECH TALK!

BASIC LOGIC FUNCTIONS



A	B	Q
0	0	0
0	1	0
1	0	0
1	1	1



A	B	Q
0	0	1
0	1	1
1	0	1
1	1	0



A	B	Q
0	0	0
0	1	1
1	0	1
1	1	1



A	B	Q
0	0	1
0	1	0
1	0	0
1	1	0



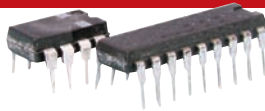
A	B	Q
0	0	0
0	1	1
1	0	1
1	1	0



A	B	Q
0	0	1
0	1	0
1	0	0
1	1	1

MICROCONTROLLER - PIC

THROUGH HOLE



Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
PIC12C508A-04P	8	8 Bit Micro	ZZ-8602	\$2.95	\$2.60	\$2.00
PIC12C509A-04P	8	8 Bit Micro	ZZ-8600	\$2.95	\$2.60	\$2.00
PIC12F675	8	8 bit flash micro	ZZ-8603	\$5.95	\$5.25	\$4.15
PIC16C711-20/P	18	8 bit micro + A to D converter	ZZ-8550	\$12.95	\$11.35	\$8.95
PIC16C63A-20/SP	28	8 bit micro + A to D converter	ZZ-8560	\$14.50	\$12.35	\$9.75
PIC16F84A-20/P	18	8 bit flash/EEPROM micro	ZZ-8500	\$12.95	\$11.35	\$8.95
PC16F88-I/P	18	8 bit enhanced flash micro + nanowatt technology	ZZ-8530	\$11.95	\$10.70	\$8.25
PIC16F628-I/P	18	8 bit flash micro	ZZ-8520	\$7.45	\$6.65	\$5.15
PIC16F877A-I/P	40	8 bit enhanced flash micro	ZZ-8540	\$12.95	\$11.35	\$8.95

SMD

- Sold as a pack of 5



NEW
LOW
PRICE

Type	Case	Description	Cat	Qty 1+
PIC12C508A-04/SMD	SOIC8	8 bit micro	ZZ-8604	\$4.95
PIC16C711-20I/SO	SOIC18	8 bit micro + A to D converter	ZZ-8552	\$14.95
PIC16F628A-20/SO	SOIC18	8 bit flash micro	ZZ-8510	\$19.95
PIC16F84A-20/SO	SOIC18	8 bit flash/EEPROM micro	ZZ-8505	\$19.95

INTEGRATED CIRCUITS

SPECIAL FUNCTION

- Major brands only



Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
1488	14	Quad line driver RS-232	ZZ-8148	\$3.75	\$3.30	\$2.60
1489	14	Quad line receiver RS-232	ZZ-8149	\$3.75	\$3.30	\$2.60
27C64	28	64k (8k x 8) EPROM	ZZ-8465	\$14.95	\$13.35	\$10.35
27C256	28	256k (32k x 8) EPROM	ZZ-8471	\$14.95	\$13.35	\$10.35
24LC168	8	16k I-C serial EEPROM	ZZ-8480	\$3.75	\$3.30	\$2.60
24LC256	8	256k I-C serial EEPROM	ZZ-8485	\$5.95	\$5.25	\$4.15
ADC0804	20	8 bit A to D converter	ZK-8862	\$14.95	\$13.35	\$10.35
DAC0800LCN	16	8 bit D to A converter	ZK-8864	\$7.95	\$7.10	\$5.50
DAC0802LCN	16	8 bit D to A converter	ZK-8866	\$16.95	\$14.95	\$11.70
L6202	18	Full bridge driver 1.5A 48V	ZK-8874	\$14.95	\$13.35	\$10.35
MAX 232	16	Dual RS232 driver/receiver	ZK-8824	\$6.95	\$6.25	\$4.75
MC34063	8	DC to DC converter	ZK-8837	\$7.95	\$7.10	\$5.50
MC145436	14	DTMF Decoder	ZK-8870	\$9.95	\$8.75	\$6.75
UA494/TL494	16	Switchmode power controller	ZK-8850	\$6.95	\$6.25	\$4.75
ULN2003N	16	7 Darlington array (5V TTL, CMOS)	ZK-8855	\$4.95	\$4.45	\$3.45
XR2206	16	Monolithic function generator	ZK-8830	\$19.95	\$17.70	\$13.70
XR2211	14	FSK demodulator/tone decoder	ZK-8831	\$9.95	\$8.75	\$6.75

8BIT 257 STEP DIGITAL POT - MCP4151-103E/P

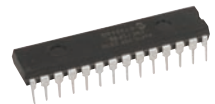
8Bit (257 step) digital pots are useful in application that require precision control. They can be used for example in the feedback network of an op amp to provide precise variable gain control, or filters to allow accurate adjustment of the filter properties.



Type	Pins	Description	Cat	Qty 1+	Qty 10+	Qty 25+
MCP4151-103E/P	8	Digital pot 257 step 10kOhm	ZK-8879	\$3.95	\$3.50	\$2.75

DIGITAL SIGNAL CONTROLLERS

- High performance enhanced flash digital signal controllers
- 16 bit architecture



Type	Memory	SRAM
dsPIC30F2010	12kB/4kB	512B
dsPIC33FJ128GP802	128kB	16kB

Type	Pins	Cat.	Qty 1+	Qty 10+	Qty 25+
dsPIC30F2010	28	ZZ-8575	\$17.95	\$15.95	\$12.35
dsPIC33FJ128GP802	28	ZZ-8605	\$18.95	\$16.95	\$12.95

PIC18F4550 MICROCONTROLLER WITH USB INTERFACE

Adding a USB interface to a project can often be a complex and difficult task, often involving a dedicated IC just to perform the USB control. With this PIC, you can do both I/O logic with your project and perform the USB communications with just one IC. USB will still require a bit of work but it won't be as complex any more as having to source a dedicated IC and learn how to use it. This PIC is ideal for embedded control and monitoring applications which require connection to a computer for data up/download, or firmware updates. This PIC is feature packed:

- Enhanced Flash and nanoWatt technology
- 2Kb memory for data
- Full Speed USB 2.0 interface (12Mbps)
- I²C[™] and SPI[™] interface (10Mbps)
- Asynchronous serial port
- 48MHz performance (12Mbps)



Type	Cat	Qty 1+	Qty 10+	Qty 25+
PIC18F4550	ZZ-8570	\$21.95	\$19.70	\$15.25

SMD SPECIAL FUNCTION ICs

RS-232 LINE DRIVER/RECEIVER

- Sold as a pack of 10



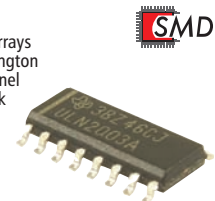
CASE DESCRIPTION

SOIC14	Quad line driver RS-232	ZK-8814
SOIC14	Quad line receiver RS-232	ZK-8876
SOIC16	Dual RS-232 driver/receiver	ZK-8822

Type	Cat.	Qty 1+
MC/DS1488M/D1	ZK-8814	\$4.95
MC/DS1489M/D1	ZK-8876	\$4.95
MAX232CWE	ZK-8822	\$59.95

SMD 7 DARLINGTON ARRAY

High voltage, high current Darlington arrays each contain seven open collector Darlington pairs with common emitters. Each channel rated at 500mA and can withstand peak currents of 600mA. Suppression diodes are included for inductive load driving and the inputs are pinned opposite the outputs to simplify board layout.



- Sold as a pack of 10

Type	Cat.	Qty 1+
ULN2003D	ZK-8858	\$36.95

LET'S FIND EVERYTHING YOU NEED!

PROGRAMMING & CUSTOMISING THE PIC MICROCONTROLLER BOOK

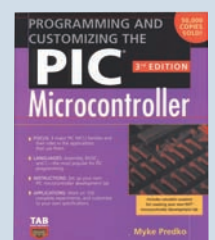
Tap into the latest advances in PIC technology with the fully revamped third edition of this brilliant book. Certainly the definitive text on the subject, this indispensable volume comes with more than 600 illustrations and provides comprehensive, easy-to-understand coverage of the PIC microcontroller's hardware and software schemes. With 100 experiments, projects and libraries, you get a firm grasp of PICs, how they work and the ins-and-outs of their most dynamic applications. This updated edition features a streamlined, more accessible format and concentrates on the three major PIC families, to help you fully understand Assembly, BASIC, and C programming languages. It also covers the latest program development tools and includes a refresher in electronics and programming as well as reference material.

Topics covered:

- Setting up your own PIC microcontroller development lab
- PIC MCU basics
- Useful tables and data

- PIC microcontroller interfacing capabilities, software development, and applications
- Basic electronics
- Digital electronics

- BASIC reference
- C reference
- 16-bit numbers
- Useful circuits and routines to get your applications up & running



↑	Cat.	Qty 1+
Soft cover, 1263 pages	BT-1347	\$94.95

SPECIALTY ICs

TDA1905 5W AMPLIFIER IC WITH MUTE

Monolithic integrated circuit in POWERDIP package, intended for use as low frequency power amplifier in a wide range of applications in radio and TV sets:

- Muting facility
- High supply voltage rejection
- Voltage range 4V to 30V
- Protection against chip over temperature
- Power dissipation of up to 6W and a thermal resistance of 15°C/W (junction to pins)
- Very low noise
- Low switch-on noise
- Full data on website



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZL-3600	\$3.95	\$3.50	\$2.75

SST49LF020 LPC FLASH MEMORY

The SST49LF020 flash memory device is designed to interface with the LPC bus for PC, game console and Internet Appliance applications. It provides protection for the storage and update of code and data in addition to adding system design flexibility through five General Purpose Inputs (GPI). The SST49LF020 is in compliance with the Intel Low Pin Count (LPC) Interface Specification 1.0. Two interface modes are supported: LPC Mode for In-System programming and Parallel Programming (PP) Mode for fast factory programming.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZZ-8900	\$14.95	\$13.35	\$10.35

IC SOCKETS

- All 0.1" (2.54mm) pitch

PRODUCTION PCB MOUNT

- Solder tail
- All tin plated phosphor bronze or beryllium copper



Pins	Width	Cat.	Qty 1+	Qty 10+	Qty 25+
6	0.3"	PI-6499	\$0.36	\$0.32	\$0.29
8	0.3"	PI-6500	\$0.38	\$0.34	\$0.30
14	0.3"	PI-6501	\$0.40	\$0.36	\$0.32
16	0.3"	PI-6502	\$0.45	\$0.41	\$0.36
18	0.3"	PI-6503	\$0.50	\$0.45	\$0.40
20	0.3"	PI-6504	\$0.55	\$0.50	\$0.44
22	0.3"	PI-6505	\$0.60	\$0.54	\$0.48
24	0.6"	PI-6506	\$0.65	\$0.59	\$0.52
28	0.6"	PI-6507	\$0.80	\$0.72	\$0.64
40	0.6"	PI-6508	\$1.00	\$0.85	\$0.75

LOW COST

MEMORY CARD SOCKETS - SURFACE MOUNTS

IC/SMART CARD ACCEPTOR

These modules are for use in circuit designs incorporating the use of Smart Cards/ IC Cards. They accept either card and feature an internal SPST switch, which is triggered by card insertion. Data sheets and specifications on the website.



MORE INFO WEB

NEW LOW PRICE

↑	Cat.	Qty 1+
Through Hole Mount	PS-0010	\$4.95

GOLD INSERT MACHINED PIN

- Anti-wicking very high quality.
- Ideal for professional / portable or field service equipment.



Pins	Width	Cat.	Qty 1+	Qty 10+	Qty 25+
6	0.3"	PI-6450	\$1.15	\$1.00	\$0.90
8	0.3"	PI-6452	\$1.25	\$1.10	\$1.00
14	0.3"	PI-6454	\$1.40	\$1.25	\$1.10
16	0.3"	PI-6456	\$1.65	\$1.45	\$1.30
18	0.3"	PI-6458	\$2.45	\$2.21	\$1.95
20	0.3"	PI-6460	\$2.65	\$2.35	\$2.07
22	0.3"	PI-6462	\$2.75	\$2.45	\$2.15
28	0.6"	PI-6466	\$3.25	\$2.90	\$2.60
40	0.6"	PI-6468	\$4.50	\$3.95	\$3.60

WIRE WRAP MACHINED

- Gold insert - machined pins



Pins	Width	Cat.	Qty 1+
16	0.3"	PI-6493	\$0.95
20	0.3"	PI-6495	\$0.95

NEW LOW PRICE

IC SOCKET STRIPS

WIRE WRAP PINS

- Gold insert
- 0.1" pitch
- Machined pin



↑	Pins	Cat.	Qty 1+	Qty 10+	Qty 25+
	20 Way	PI-6473	\$5.95	\$5.25	\$4.75
	32 Way	PI-6472	\$8.50	\$7.50	\$6.75

STANDARD PINS

- Gold insert
- 0.1" pitch
- Machined pin



↑	Pins	Cat.	Qty 1+	Qty 10+	Qty 25+
	32 Way	PI-6470	\$3.95	\$3.50	\$3.15

ZIF SOCKETS

Zero Insertion Force. Drop the device in and close the lever to contact pins. Ideal for production testing.



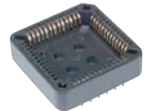
↑	Pins	Cat.	Qty 1+	Qty 10+	Qty 25+
	18	PI-6480	\$9.50	\$8.50	\$7.50
	28	PI-6483	\$14.50	\$12.35	\$10.95
	40	PI-6484	\$15.50	\$13.35	\$11.70

PLCC SOCKETS

THROUGH HOLE

- Gold plated phosphor bronze contacts.
- Height: 7.7mm

Size	Size L x W mm	Cat.	Qty 1+	Qty 10+	Qty 25+
28 pin	18 x 18	PI-6600	\$2.95	\$2.60	\$2.40
32 pin	20.6 x 20.6	PI-6602	\$3.45	\$3.05	\$2.75
44 pin	23.5 x 23.5	PI-6604	\$3.95	\$3.45	\$3.15
52 pin	26 x 26	PI-6606	\$4.50	\$3.95	\$3.60



SURFACE MOUNT

- Silver plated phosphor bronze contacts.
- Height: 4.5mm

Size	Size L x W mm	Cat.	Qty 1+
28 pin	18 x 18	PI-6620	\$0.95
44 pin	23.5 x 23.5	PI-6624	\$0.95
68 pin	31 x 31	PI-6628	\$0.95
84 pin	36 x 36	PI-6630	\$0.95

NEW LOW PRICE



LET'S FIND EVERYTHING YOU NEED!

SOLDERING HEATSINK & COMPONENT HOLDER

This quality small tool is ideal as a heatsink when soldering to remove some of the heat from the semiconductor/ component while soldering. It can also be used to hold small parts while soldering to avoid burnt fingers. Supplied with insulated handles.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
65mm long	TD-2122	\$7.95	\$7.10	\$6.25

IC EXTRACTOR

Deceptively simple looking device.

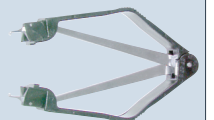
- One piece metal construction
- 8 - 40 pins



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1818	\$3.75	\$3.30	\$2.95

PLCC EXTRACTOR

There's really only one way to remove a PLCC safely - and this is it. Basically a spring assisted clip carrier extractor, specifically designed for the safe and hassle free removal of PLCCs from sockets.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1816	\$13.95	\$12.35	\$10.95

BUDGET SMD VACUUM PICKUP TOOL

Fits into your pocket and uses vacuum pressure to pick up your sensitive components without damaging them.

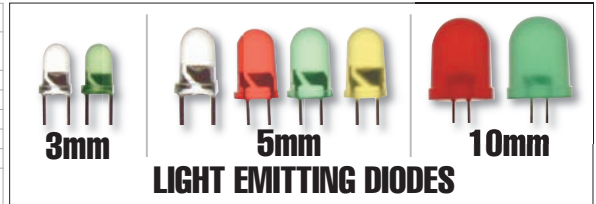
- Easy to use, one-hand operation.
- Picks up to 20g in weight.
- Supplied with 3 vacuum pads.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1978	\$17.95	\$15.95	\$14.35

STANDARD LEDs

Viewing Angle	Is the complete angle where the luminous intensity is half the on-axis intensity.
Wavelength	Dominant Wavelength of the light emitted in nm (nanometers). This determines the colour of the LED.
IF Typical	Continuous forward current in mA to obtain typical optical characteristics.
VF Typical	Continuous forward voltage in Volts to obtain typical optical characteristics.
IF Max	Maximum continuous forward current in mA at 25°C.
VDD Typical	Operating voltage to obtain typical optical characteristics.
VDD Max	Absolute maximum supply voltage at 25°C.
IV Typical	Light emitted from the LED is quantified by a single point, ie the on-axis Luminous Intensity value in mcd (millicandela) at IF Typical.



- Luminous intensity (IV) does not represent total light output from an LED. Both the luminous intensity and the spatial radiation pattern (viewing angle) must be taken into account.
- If two LEDs have the same luminous intensity value, the lamp with the larger viewing angle will have the higher total light output.
- Maximum luminous intensity can be achieved by operating the LED in pulsed mode, or maximum continuous forward current.

3MM LEDs

*Cree®

Optical and Electronic Characteristics								Max Continuous	Preferred Value Series						
Size (mm)	Viewing Angle (Degrees)	Colour	Lens	Wavelength, Chromatic (nm), Co-ordinates	IF Typical (mA)	VF Typical (V)	IV Typical (mcd)	IF Max (mA)	Resistor (ohms) for			Cat.	Qty 1+	Qty 10+	Qty 25+
3	45	Red	Diffused	650	15	2.3	40	15	180	470	680	ZD-0100	\$0.25	\$0.23	\$0.18
3	15	Red	Waterclear	660	20	1.8	1500	30	160	360	510	ZD-0102	\$0.70	\$0.63	\$0.49
3	20	Red	Waterclear	625	20	2.0	2100	50	150	360	510	ZD-0104	\$1.45	\$1.30	\$0.99
3	15	Red	Waterclear	625	20	2.1	7000	30	150	360	510	ZD-0106	\$4.45	\$3.95	\$3.05
3	45	Orange	Diffused	625	20	1.9	35	30	160	360	510	ZD-0119	\$0.35	\$0.32	\$0.25
3	50	Yellow	Diffused	585	20	2.1	10	20	150	360	510	ZD-0110	\$0.25	\$0.23	\$0.18
3	20	Yellow	Waterclear	588	20	2.0	3000	50	150	360	510	ZD-0112	\$1.75	\$1.55	\$1.20
3	15	Yellow	Waterclear	588	20	2.2	6500	50	150	360	510	ZD-0114	\$3.95	\$3.50	\$2.75
3	50	Green	Diffused	573	20	2.3	40	20	130	330	470	ZD-0120	\$0.25	\$0.23	\$0.18
3	20	Green	Waterclear	568	20	2.1	500	30	150	360	510	ZD-0122	\$1.45	\$1.30	\$0.99
3	20	Green	Waterclear	520	20	3.2	6000	20	91	300	470	ZD-0124	\$6.45	\$5.75	\$4.45
3	15	Aqua	Waterclear	505	20	3.5	4000	30	75	270	430	ZD-0126	\$5.45	\$4.90	\$3.75
3	15	Blue	Waterclear	465	20	3.3	1500	20	82	300	430	ZD-0130	\$2.75	\$2.45	\$1.90
3	15	Blue	Waterclear	470	20	3.2	3700	30	91	300	430	ZD-0132	\$5.95	\$5.25	\$4.15
3	15	White	Waterclear	0.31/0.32	20	3.2	1000	20	91	300	430	ZD-0140	\$2.75	\$2.45	\$1.90
3	20	White	Waterclear	0.31/0.32	20	3.2	5000	30	91	300	430	ZD-0142	\$3.95	\$3.50	\$2.75

5MM LEDs

5	50	Red	Diffused	700	20	2.3	8	30	130	330	470		ZD-0150	\$0.30	\$0.27	\$0.21
5	15	Red	Waterclear	660	20	1.7	500	30	160	360	510		ZD-0152	\$0.85	\$0.77	\$0.60
5	15	Red	Waterclear	625	20	2.0	4000	50	150	360	510		ZD-0154	\$1.45	\$1.30	\$0.99
5	15	Red	Waterclear	625	20	2.1	10000	50	150	360	510		ZD-0156	\$3.45	\$3.05	\$2.35
5	15	Red	Waterclear	624*	30	2.1	23500	30	100	240	330		ZD-0293	\$5.45	\$4.90	\$3.75
5	8	Red	Waterclear	616	50	2.1	35000	50	62	150	200		ZD-1790	\$4.45	\$3.95	\$3.05
5	40	Orange	Diffused	635	20	2.0	10	30	150	360	510		ZD-0169	\$0.30	\$0.27	\$0.21
5	50	Yellow	Diffused	585	20	2.1	8	30	150	360	510		ZD-0160	\$0.30	\$0.27	\$0.21
5	15	Yellow	Waterclear	590	20	2.2	2500	20	150	360	510		ZD-0162	\$1.45	\$1.30	\$0.99
5	15	Yellow	Waterclear	588	20	2.0	5200	50	150	360	510		ZD-0164	\$1.65	\$1.45	\$1.15
5	15	Yellow	Waterclear	588	20	2.3	10500	50	130	330	470		ZD-0166	\$4.25	\$3.75	\$2.95
5	15	Yellow	Waterclear	591*	30	2.1	23500	30	100	230	330		ZD-0295	\$5.45	\$4.90	\$3.75
5	50	Green	Diffused	570	20	2.3	10	30	130	330	470		ZD-0170	\$0.30	\$0.27	\$0.21
5	30	Green	Waterclear	525	20	3.5	7500	30	75	270	430		ZD-0172	\$2.35	\$2.09	\$1.60
5	15	Green	Waterclear	515	20	3.5	8500	30	75	270	430		ZD-0174	\$4.25	\$3.75	\$2.95
5	20	Green	Waterclear	525	20	3.2	12000	20	91	300	430		ZD-0176	\$5.45	\$4.90	\$3.75
5	15	Green	Waterclear	527*	30	3.2	64600	30	62	200	300		ZD-0292	\$6.45	\$5.75	\$4.45
5	15	Aqua	Waterclear	505	20	3.5	8500	30	75	270	430		ZD-0178	\$4.45	\$3.95	\$3.05
5	40	Blue	Diffused	470	20	3.3	350	30	82	300	430		ZD-0185	\$2.35	\$2.09	\$1.60
5	15	Blue	Waterclear	468	20	3.2	2500	30	91	300	430		ZD-0180	\$2.75	\$2.45	\$1.90
5	15	Blue	Waterclear	470	20	3.2	4850	30	91	300	430		ZD-0182	\$4.45	\$3.95	\$3.05
5	15	Blue	Waterclear	470*	30	3.2	23500	30	62	200	300		ZD-0291	\$5.45	\$4.90	\$3.75
5	30	White	Waterclear	0.31/0.31	20	3.2	4000	30	91	300	430		ZD-0190	\$2.75	\$2.45	\$1.90
5	20	White	Waterclear	0.31/0.32	20	3.2	10000	30	91	300	430		ZD-0192	\$3.75	\$3.30	\$2.60
5	15	White	Waterclear	0.31/0.32	20	3.3	20000	30	82	300	430		ZD-0195	\$5.50	\$4.90	\$3.75
5	15	White	Waterclear	0.29/0.29*	30	3.2	45000	30	62	200	300		ZD-0290	\$5.75	\$5.15	\$3.95
5	30	UV	Waterclear	405	20	3.3	60	20	91	300	430		ZD-0260	\$5.50	\$4.90	\$3.75

NEW LOW PRICE

LET'S FIND EVERYTHING YOU NEED!

LED PACK - RED

- 5-20mcd @ 20mA typical



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
3mm Pkt 100	ZD-1692	\$13.95	\$12.35	\$9.75
5mm Pkt 100	ZD-1690	\$17.95	\$15.95	\$12.35

ASSORTED LED PACK

Consisting of 20 x 5mm red, 20 x 5mm mixed (green, yellow, orange), 40 x 3mm red, 20 x 3mm mixed (green, yellow, orange). BONUS 10 x 5mm mounting hardware AT NO CHARGE.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 100	ZD-1694	\$29.95	\$26.90	\$20.70

LED TESTER





With this basic but essential tool it is possible to check the function, brightness, colour and polarity of most kinds of light emitting diodes (LED). The LED to be tested plugs into the front panel, at the current you wish to test it with. Two 10mA positions have been included on this multi-LED tester so that comparisons between two LEDs can be made simultaneously.

- Operating voltage: 9V (battery required)
- Test currents: 1mA, 2.5mA, 5mA, 10mA, 20mA, 50mA
- Dimensions: 58 x 44 x 25mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0274	\$13.95	\$12.35	\$10.95

STANDARD LEDs (CONTINUED)

Optical and Electronic Characteristics								Max	Preferred Value Series							
Size (mm)	Viewing Angle (Degrees)	Colour	Lens	Wavelength, Chromatic (nm), Co-ordinates	IF Typical (mA)	VF Typical (V)	IV Typical (mcd)	Continuous IF Max (mA)	5VDC	9VDC	12VDC	Cat.	Qty 1+	Qty 10+	Qty 25+	
10MM LEDs																
10	16		Red	Diffused	635	20	2.0	100	20	150	360	510	ZD-0200	\$0.75	\$0.68	\$0.53
10	30		Red	Waterclear	625	20	2.0	2000	50	150	360	510	ZD-0201	\$1.45	\$1.30	\$0.99
10	30		Red	Waterclear	625	20	2.0	4500	50	150	360	510	ZD-0202	\$2.75	\$2.45	\$1.90
10	20		Orange	Waterclear	610	20	2.4	9000	50	130	330	470	ZD-0225	\$3.45	\$3.05	\$2.35
10	35		Yellow	Diffused	585	20	2.0	63	30	150	360	510	ZD-0210	\$0.75	\$0.68	\$0.53
10	30		Yellow	Waterclear	588	20	2.0	4000	50	150	350	510	ZD-0211	\$1.45	\$1.30	\$0.99
10	30		Yellow	Waterclear	588	20	2.2	4500	50	150	360	510	ZD-0212	\$2.75	\$2.45	\$1.90
10	50		Green	Diffused	570	20	2.2	100	20	150	360	510	ZD-0205	\$0.75	\$0.68	\$0.53
10	30		Green	Waterclear	525	20	3.1	13000	20	100	300	430	ZD-0206	\$3.95	\$3.50	\$2.75
10	30		Blue	Waterclear	470	20	3.5	1200	30	75	270	430	ZD-0215	\$3.95	\$3.50	\$2.75
10	30		White	Waterclear	0.25/0.26	20	3.2	5000	30	91	300	430	ZD-0220	\$3.95	\$3.50	\$2.75

5 X 2MM RECTANGULAR LEDs

5 x 2	155	Red	Diffused	643	20	2.3	5	20	130	330	470	ZD-0230	\$0.50	\$0.45	\$0.35
5 x 2	155	Yellow	Diffused	590	20	1.9	10	20	160	360	510	ZD-0234	\$0.50	\$0.45	\$0.35
5 x 2	155	Green	Diffused	573	20	2.3	15	20	130	330	470	ZD-0232	\$0.50	\$0.45	\$0.35

3MM SUPERFLUX

3 Superflux	90	White	Waterclear	0.29/0.29	Cree®	35	3.6	3000	35	43	160	240	ZD-0020	\$6.50	\$5.75	\$4.45
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Optical and Electronic Characteristics															Preferred Values Series			Cat.	Qty 1+	Qty 10+	Qty 25+
Size (mm)	Viewing Angle (Degrees)	Colour	Lens	Wavelength (nm)	IF Typical (mA)	VF Typical (V)	IV Typical (mcd)	Max Continuous IF Max (mA)	Resistor (ohms) 5VDC 9VDC 12VDC												

BI LEDs

Bi	3	65	Red	Diffused	605	20	2.1	1.3	30	150	360	510	ZD-0248	\$1.25	\$1.10	\$0.85
		65	Green	Diffused	570	20	2.3	1.5	30	150	360	510	ZD-0250	\$1.25	\$1.10	\$0.85
Bi	5	90	Red	Diffused	625	20	2.1	7.6	30	150	360	510	ZD-0250	\$1.25	\$1.10	\$0.85
		90	Green	Diffused	567	20	2.2	10	30	150	360	510	ZD-0255	\$1.45	\$1.30	\$0.99
Bi	10	75	Red	Diffused	625	20	2.0	10	30	150	360	510	ZD-0255	\$1.45	\$1.30	\$0.99
		75	Green	Diffused	570	20	2.1	10	30	150	360	510	ZD-0249	\$1.25	\$1.10	\$0.85
Bi	3	75	Orange	Diffused	625	20	2.0	4.5	30	150	360	510	ZD-0249	\$1.25	\$1.10	\$0.85
		75	Green	Diffused	570	20	2.1	6	30	150	360	510	ZD-0252	\$1.35	\$1.20	\$0.90
Bi	5	90	Orange	Diffused	625	20	2.1	70	30	150	360	510	ZD-0252	\$1.35	\$1.20	\$0.90
		90	Green	Diffused	568	20	2.2	80	30	150	360	510	ZD-0256	\$1.75	\$1.55	\$1.20
Bi	10	75	Red	Diffused	625	20	2.0	10	30	150	360	510	ZD-0256	\$1.75	\$1.55	\$1.20
		75	Green	Diffused	570	20	2.1	10	30	150	360	510				

TRI LEDs

Tri	5 common anode	45	Red	Diffused	625	20	2.0	600	30	150	360	510	ZD-0270	\$7.45	\$6.65	\$5.15
		45	Green	Diffused	520	20	3.5	1000	30	75	270	430				
		45	Blue	Diffused	470	20	3.5	200	30	75	270	430				
Tri	5 Superflux common anode	60	Red	Waterclear	643	20	1.8	200	20	160	360	510	ZD-0010	\$5.75	\$5.15	\$3.95
		60	Green	Waterclear	528	20	3.2	900	20	91	300	470				
		60	Blue	Waterclear	468	20	3.2	150	20	91	300	470				
Tri	5 Superflux common anode	60	Red	Waterclear	630	20	1.8	350	20	160	360	510	ZD-0012	\$5.75	\$5.15	\$3.95
		60	Green	Waterclear	528	20	3.2	600	20	91	300	470				
		60	Blue	Waterclear	468	20	3.2	900	20	91	300	470				

Optical and Electronic Characteristics									Absolute Max				
Size (mm)	Viewing Angle (Degrees)	Colour	Lens	Wavelength (nm)	IF Typical (mA)	VDD Typical (V)	IV Typical (mcd)	VDD Max (V)	Cat.	Qty 1 + Qty 10 +	Qty 25 +		

FLASHING LEDs

Flashing	5	50	Red	Diffused	630	20	5.0	50	10	ZD-0240	\$1.45	\$1.30	\$0.99
Flashing	5	30	Red	Diffused	643	20	5.0	60	10	ZD-1785	\$2.35	\$2.09	\$1.60
Flashing	5	45	Yellow	Diffused	597	20	5.0	35	10	ZD-0244	\$1.45	\$1.30	\$0.99
Flashing	5	45	Green	Diffused	568	20	5.0	35	10	ZD-0242	\$1.45	\$1.30	\$0.99
Flashing	5	40	Blue	Diffused	470	20	5.0	900	10	ZD-0245	\$2.35	\$2.09	\$1.60
Flashing	10	50	Red	Diffused	660	20	5.0	50	10	ZD-1965	\$2.85	\$2.53	\$1.95

TRI COLOUR SEQUENCING LEDs

Tri	30	Red	Waterclear	625	20	4.5	500	4.5	ZD-0247	\$7.75	\$6.90	\$5.25
Colour	5	30	Green	Waterclear	520	20	4.5	5000				
Sequencing	30	Blue	Waterclear	470	20	4.5	2000	4.5				

LET'S FIND EVERYTHING YOU NEED!

LED CLIPS

- Black.
- 3mm requires a 4mm panel hole, 5mm needs a 6.35mm.
- Simply push clip in panel & insert LED



↑	Pkt	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
	Pkt 20	3mm	HP-1100	\$3.50	\$3.15	\$2.45
	Pkt 20	5mm	HP-1102	\$3.50	\$3.15	\$2.45
	Pkt 100	5mm	HP-1103	\$16.50	\$14.35	\$10.95

10MM LED BEZELS

- Black, requires a 14mm panel hole and simply snaps in. LED not included.



↑	Pkt	Cat.	Qty 1+	Qty 10+	Qty 25+
	Pkt 5	HP-1110	\$8.95	\$7.95	\$6.25

LIGHT TRANSPORTERS - 100MM - PACK OF 3

These fibre optic light transporters are simply clipped over the LED and mounted to the panel. With high light conductivity the intensity will not diminish. Much easier to install than LED clips! Hole cut-out size: 3.5mm



⬆	Pack	Cat.	Qty 1+	Qty 10+	Qty 25+	
	Suit SMD LEDs	3	HP-1192	\$12.95	\$11.35	\$8.95
	Suit 3mm LEDs	3	HP-1193	\$12.95	\$11.35	\$8.95

LED MOUNTS

3MM - HP-1118

- 3 way

5MM - HP-1114

- Single - 45° angle

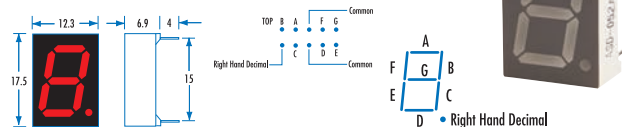


↑	Pkt	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
	Pkt 20	3mm	HP-1118	\$7.95	\$7.10	\$5.50
	Pkt 20	5mm	HP-1114	\$5.95	\$5.25	\$4.15
	Pkt 100	5mm	HP-1115	\$17.95	\$15.95	\$12.35

7 SEGMENT LED DISPLAYS

SMALL DISPLAYS - RED

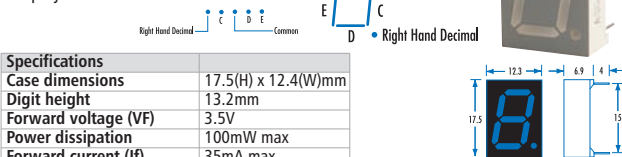
FND500 / LTS543R / S505RWB COMMON CATHODE
FND507/LTS542R/S50 RWB COMMON ANODE



	Cat.	Qty 1+	Qty 10+	Qty 25+
Common Cathode	ZD-1855	\$3.95	\$3.50	\$2.75
Common Anode	ZD-1857	\$3.95	\$3.50	\$2.75

SMALL DISPLAY - BLUE

Blue Common Cathode 7-Segment
Display - ASD-052C
Display colour Blue



	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1856	\$7.65	\$6.75	\$5.25

SMD TYPE LEDs - PACKS OF 10

Range of 3 colours in "Gull Wing" style package.
• Water clear lens.



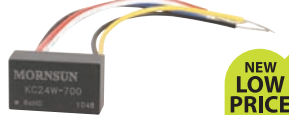
	Pkt	Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	10	625nm - 70mcd @20mA	ZD-2000	\$3.50	\$3.15	\$2.45
Yellow	10	590nm - 40mcd @20mA	ZD-2005	\$3.50	\$3.15	\$2.45
Green	10	565nm - 100mcd @20mA	ZD-2010	\$3.50	\$3.15	\$2.45

LED POWER SUPPLIES

DIMMABLE CONSTANT CURRENT LED DRIVER MODULE

A compact, high quality solution from Mornsun for driving high power LEDs which require a constant current power supply. Fully potted with a special coating to reduce electromagnetic interference, this driver is quite versatile in terms of both physical fitment and electrical compatibility. Powered by 5.5-48.0VDC, they can drive up to 10 LEDs in series (input voltage must exceed LED forward voltage though), and can be dimmed either by analogue or PWM signal - meaning that even a simple potentiometer can provide dimming. Suitable for driving our new Cree® XP-G and MC-E models, however will not reach the full 1500mA drive current capacity of the Cree® XP-G. Full datasheet available on our website.

Specifications	AA-0595
Input voltage	5.5 - 48VDC
Output current	0-700mA
Dimming	Analogue or PWM signal
Efficiency	96%
Dimensions	24(L) x 14(W) x 8(H)mm



	Current	Cat.	Qty 1+
	0-700mA	AA-0595	\$10.95

SEE PAGE 114 FOR LED
MODULE HEATSINK

POWER SUPPLY FOR LUXEON® LED STAR MODULES

This tiny star LED driver module provides a regulated current supply that is perfectly matched to the requirements of our Star LEDs. It will detect how many LEDs are loaded onto the output and automatically provide the correct voltage and regulated current, removing the necessity for any current-limiting resistors. The small size makes them perfect for custom lighting applications. One module can drive up to 3 star LEDs in series.

- Input Voltage: 12-13.5VAC/DC
- Dimensions: 22mm diameter.



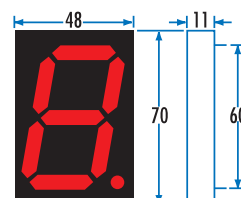
	Wattage	Cat.	Qty 1+
	1W	AA-0583	\$10.95

SUPER LARGE DISPLAY - RED
COMMON CATHODE

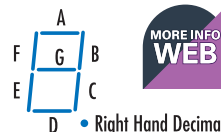
Actual numbers 2.3" (58mm) high. Ideal for house numbers, clocks, etc.

- Red 635nm

Specifications	ZD-1850
Digit height	58mm
Case dimensions	70(H) x 48(W)mm
Luminous intensity (IV)	4mcd per segment @ 10mA
Viewing angle	150°
Forward voltage (VF)	Segments 8V, decimal 2V
Face colour	Grey
Max current per segment	30mA
Forward current (If)	10mA



	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1850	\$14.95	\$13.35	\$10.35



MORE INFO
WEB

- Right Hand Decimal



CREE® XP-G LED LENS

NARROW ANGLE COLLIMATOR LENS FOR
CREE® XP-G HIGH POWER LED

The Cree® XP-G LED technology provides tremendous light from a tiny module. Harness that light and give it direction with these collimator lenses. The lenses clip directly into the holes on the LED module without any additional hardware keeping the whole package to a minimal size. LED and lens together measure a mere 9mm total height when assembled while retaining the 10mm diameter of the LED.



Lenses available in narrow or wide angle versions:

CREE®
LEDs

NEW
LOW
PRICE

	Cat.	Qty 1+
13° Narrow Angle	HP-1282	\$2.95
24° Wide Angle	HP-1284	\$2.95

COLLIMATOR LENS FOR CREE® LEDs

Collimator lenses are designed to increase LED efficiency by reducing light loss caused by 'beam spreading' and provide a brighter, more focused beam. Suitable for our Cree® Star LEDs.

- Dispersion Angle: 25°

CREE®
LEDs



NEW
LOW
PRICE

	Cat.	Qty 1+
	HP-1297	\$1.95

COLLIMATOR LENS FOR STAR LED MODULE

A collimator is an optical device which is designed to produce a light beam in which the rays are parallel, or at least very near parallel. While we normally consider LEDs to be very focused in terms of light spread, in many applications there is still a vast quantity of "wasted" light spread. Designed to suit our Star LED modules (Lambertian LED models only) and are manufactured from quality optical components. Dispersion angle: 15°



NEW
LOW
PRICE

	Cat.	Qty 1+
	HP-1292	\$1.95

NARROW ANGLE REFLECTOR FOR CREE®
MC-E HIGH POWER LED

Focuses the tremendous light output from the Cree® MC-E LED module into a narrow 10° beam. Fits neatly over the MC-E module and extends 16mm in front of the emitter. LED module & lens combined is a mere 20mm in height.

- Dimensions: 34(Dia) x 16(H)mm

CREE®
LEDs



NEW
LOW
PRICE

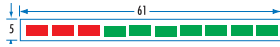
	Cat.	Qty 1+
	HP-1280	\$2.95

BAR GRAPHS & DISPLAYS

LED BAR GRAPH

5mm x 2.5mm rectangular LEDs mounted in a black housing. Ideal for VU meters or where any visual level is required.

- VU 7 Green & 3 Red

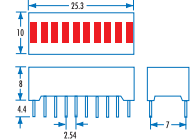


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1702	\$5.95	\$5.25	\$4.15

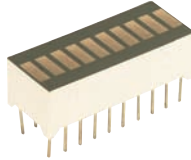
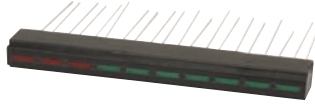
DIL LED

Ten individual LED elements housed in a 20 pin package to form a compact linear bar display which may be stacked end to end to create bargraphs of different lengths. Will plug into a standard 20 pin IC socket.

10 red LEDs. Typical intensity is 2.2mcd per LED.



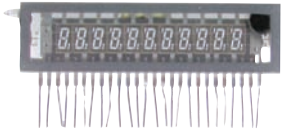
↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1704	\$4.95	\$4.45	\$3.45



11 DIGIT FLUORO DISPLAY

Vacuum fluorescent displays - still look the best. Each digit measures 6.0(H) x 3.5(W) mm, 11 digits in all. The display also features an apostrophe in the top right hand corner of the digits, and a semicolon (:) in the bottom in all 11 digits.

- Futaba brand
- Electrical and mechanical data is included.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1880	\$2.95	\$2.60	\$1.95

DRIVER IC ALLEGRO BRAND UDN6118A FOR FLUORO DISPLAY ABOVE.

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1882	\$9.95	\$8.75	\$6.75

4 DIGIT FIELD EFFECT LCD

Suitable for meters, gauges, timers, counters and 12/24hr clocks. Extremely easy to drive and no external driver IC required. 40 pin package. Use Cat PI-6470 for socket mounting (2pc required)

Specifications	ZD-1886
Driving voltage	3 volts
Digit height	12.7mm
View area	45 x 17
Display size	51 x 30.5mm
Pin spacing	2.5mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1886	\$9.95	\$8.75	\$6.75

BEZELS - LOW VOLTAGE

3MM LED BEZELS - 2V

Chrome housing.

- 2V, 15 - 30mA
- Panel hole 5mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2615	\$3.45	\$3.05	\$2.35
Green	SL-2616	\$3.45	\$3.05	\$2.35
Blue	SL-2617	\$4.50	\$3.95	\$3.15

5MM LED BEZELS - 2V

Chrome housing.

- 2V, 15 - 30mA
- Panel hole 8mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2610	\$2.35	\$2.09	\$1.60
Green	SL-2612	\$2.35	\$2.09	\$1.60
Blue	SL-2613	\$5.50	\$4.90	\$3.75

MINI CHROME BEZELS - 12V

These are very classy and have either a bright 3mm red or green LED in the chrome casing. The casing measures only 10mm long & hole cutout of only 5mm.

- Supplied with flying leads about 100mm long
- Includes dropping resistor.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2644	\$3.95	\$3.50	\$2.75
Green	SL-2645	\$3.95	\$3.50	\$2.75

CHROME BEZEL LED - 24V

Classy chrome casing with either a red or green 3mm LED. Supplied with flying leads with resistor, 5mm hole required.

Two types available:



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Green	SL-2646	\$3.95	\$3.50	\$2.75
Red	SL-2647	\$3.95	\$3.50	\$2.75

IP67 CHROME LED BEZELS - 12V

IP67 (waterproof) rated LED lamp bezel in a chrome housing. Perfect for applications where protection from dust and water ingress are required.

- 12VDC
- Panel hole: 8mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2625	\$7.95	\$6.95	\$5.50
Green	SL-2627	\$7.95	\$6.95	\$5.50

LOW VOLTAGE BEZELS - 6 & 12V

Accepts Lilliput globes.

- Panel hole 10mm.
- Length 29mm.
- Requires Lilliput globes SL-2650 6V
- SL-2652 12V



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2620	\$2.25	\$2.00	\$1.80
Green	SL-2622	\$2.25	\$2.00	\$1.80

LILLIPUT GLOBES TO SUIT BEZELS

- Total length 17mm.
- Width 4.5mm.
- Glass length 8mm.



↑	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
6.3V	200mA	SL-2650	\$0.95	\$0.85	\$0.75
12V	120mA	SL-2652	\$0.95	\$0.85	\$0.75

BEZEL SMALL - 12V

Red, sealed, 12 volt bright bezel for any application.

- Small size.
- Panel hole 7mm.
- Length 34mm.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2640	\$1.95	\$1.75	\$1.55

BEZEL MEDIUM - 12V

Red, sealed, ideal for cars as an indicator for driving lights, etc.

- Also suitable for burglar alarms.
- Panel cut out 10mm.
- Rectangular lens 13 x 16mm.
- Length 45mm.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2642	\$1.95	\$1.75	\$1.55

12V BEZEL LARGE - 12V

- Perfect for car alarms.
- Orange lens which measures 20 x 20mm.
- Panel hole 15mm.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Orange	SL-2694	\$2.95	\$2.60	\$2.30

LED BEZELS - HIGH VOLTAGE

CHROME BEZELS - 240V

Very smart units.

- Length 32mm
- 70mm leads.
- Panel hole 7mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2632	\$3.45	\$3.05	\$2.75
Green	SL-2633	\$3.45	\$3.05	\$2.75

BEZEL - 240V

Red, spade lug connections.

- Small round flat end
- Total length 45mm
- 10mm diameter
- Cut out hole 9mm.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2630	\$1.95	\$1.75	\$1.55

90V NE2 NEON

Would you believe it? After about 100 years of orange-red neons we now can get blue and green ones! You'll buy one out of curiosity!

- Strike voltage: 82V
- Needs 270k resistor in series for 240V operation



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Orange/Red	SL-2690	\$1.25	\$1.10	\$1.00
Blue	SL-2695	\$1.25	\$1.10	\$1.00
Green	SL-2696	\$1.25	\$1.10	\$1.00

DO A FRIEND A FAVOUR

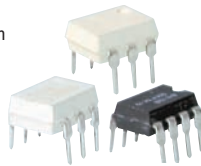
If you have a technical friend or someone who may be just interested in some of the products we stock, simply mail or email his or her address to:

Catalogue Department
Jaycar Electronics:
PO Box 7172
Silverwater, NSW 1811
or email
to catalogue@jaycar.com

OPTOCOUPLED

NON - ZERO CROSSING

- Excellent stability - IR emitting diode has low degradation
- High isolation voltage - minimum 7500VAC peak
- Underwriters Laboratory (UL) recognised - file# E90700
- Recommended for 240VAC RMS applications
- Vending machines
- Triac driver
- Motor control
- Industrial controls
- Solid state relay
- Traffic lights



↑	Type	Pins	Cat	Qty 1+	Qty 10+	Qty 25+
	MOC3020/MOC3021	6	ZD-1920	\$3.85	\$3.45	\$2.75

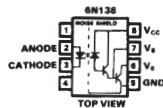
PHOTOTRANSISTOR OPTOCOUPLED

- AC line / digital logic isolator
- Digital logic / digital logic isolator
- Telephone / telegraph line receiver
- Twisted pair line receiver
- High frequency power supply feedback control
- Relay contact monitor
- Power supply monitor
- Small package size and low cost
- Excellent frequency response
- UL recognised - file# E90700

↑	Type	Pins	Cat	Qty 1+	Qty 10+	Qty 25+
	4N28/4N25	6	ZD-1928	\$1.95	\$1.75	\$1.35

DARLINGTON OPTOCOUPLED

- Low current - 0.5mA
- Superior CTR-2000%
- Superior CMR-10 kV/μs
- Double working voltage 480VRMS
- CTR guaranteed 0-70°C
- UL recognised file# E90700
- Dual channel - HCPL2730, HCPL-2731
- Applications
- Digital logic ground isolation
- Telephone ring detector
- EIA-RS232C line receiver
- High common mode noise line receiver
- μP bus location
- Current loop receiver



↑	Type	Pins	Cat	Qty 1+	Qty 10+	Qty 25+
	6N138	8	ZD-1940	\$4.95	\$4.45	\$3.45

SMD OPTOCOUPLED

↑	Type	Case	Pkt	Cat	Qty 1+	Qty 10+	Qty 25+
	4N35S	S01C6	10	ZD-1934	\$11.95	\$10.70	\$8.25
	TLP113	S01C6	EA	ZD-1941	\$6.95	\$6.25	\$4.75



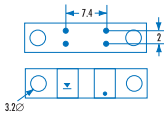
PHOTO INTERRUPTER

This device enables you to turn a circuit on and off optically. It consists of a moulded plastic housing with an IR LED facing a phototransistor across a gap. Any object in the gap will interrupt the IR beam and consequently switch the phototransistor on and off. The device is very fast and ideal for counting, timing or sensing. Full specs supplied with each unit.

- PCB or chassis mounting
- Low cost
- Rugged one piece construction
- Very fast

Application:

- Counter sensor
- Tachometer
- Opto ignition
- Edge sensor
- Tape end sensor.



↑	Cat	Qty 1+	Qty 10+	Qty 25+
	ZD-1901	\$4.45	\$3.95	\$3.05

TOSLINK TRANSMITTER & RECEIVER HEAD

- 3.3V or 5V single power supply
- Low power consumption
- 16 Mbps (NRZ signal) throughput
- Input is TTL compatible
- Supplied with plug
- Fits standard Toslink cable



Application	DVD players, computer sound cards, USB digital / audio interfaces, most digital audio devices
Transmitter	Receivers, amplifiers, decoders, computer sound cards, USB digital audio interfaces, most digital audio devices.

↑	Cat	Qty 1+	Qty 10+	Qty 25+
	Optical Receiver 16Mbps 5V ZL-3003	\$6.50	\$5.75	\$4.45

HALL EFFECT SWITCHES

HALL EFFECT SENSOR

UGN3503U HALL EFFECT SENSOR IC
A miniature sensor to accurately track extremely small changes in magnetic flux density - changes generally too small to operate Hall effect switches. Applications include notch sensor, current monitor, gear tooth sensor, etc.

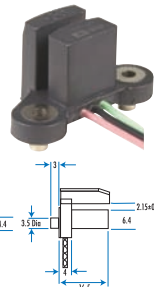
Specifications	ZD-1902
Operating voltage	4.5 - 6VDC
Supply current	Typ. 9mA
Output voltage	Typ. 2.5V DC
Output resistance	50Ω
Size	4.5(W) x 4.5(H) x 1.5(D)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
UGN3503U	ZD-1902	\$7.75	\$6.90	\$6.15

HKZ-101 HALL EFFECT SWITCH

This device is a rugged Hall effect switch designed for automotive ignition applications. This device consists of a Hall effect semiconductor sensor separated across a small gap by a magnet. In its normal state the Hall sensor (with inbuilt output transistor) is conducting. It will sink up to 40mA between the impressive temperature range of -40 to +150 degrees C. When an iron vane is introduced into the gap between the Hall element and the magnet, the output transistor switches off. The sensor is hermetically sealed, resistant to petroleum products and incorporates metal bushing mounting holes to facilitate fitting to a carrier plate, bracket etc. It is ideal as the commutator for an electronic ignition; however it has many other usage areas. Lead connections: Red V+, Black earth, Green signal (on/off).



↑	Cat	Qty 1+	Qty 10+	Qty 25+
	ZD-1900	\$24.95	\$22.35	\$19.70

PRESSURE SENSOR

PRESSURE DIFFERENTIAL SENSOR

The ZD-1904 piezo resistive pressure sensor provides a very accurate and linear voltage output directly proportional to the applied pressure. The sensor houses a single monolithic silicon die with a strain gauge and thin film resistor network on each chip.

- 0°C to 85°C temperature compensation
- 0 to 10kPa (0 to 1.45 psi)
- 25mV full scale span



↑	Cat	Qty 1+	Qty 10+	Qty 25+
	ZD-1904	\$44.95	\$40.45	\$35.90

LET'S FIND EVERYTHING YOU NEED!

ELECTRONICS DEMYSTIFIED

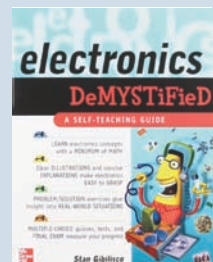
Part of the popular Demystified series, this book teaches you electronics theory, it does not include projects. If you have enjoyed the Short Circuits or Fun Way Project books and want to know more, this is your next book. It places all that project experience on a sound technical grounding. It avoids heavy mathematical formulae, but, be warned there are equations in this book. They are not seriously hard though! The book starts at simple DC circuits, goes through AC circuits, impedance, reactance, power supply concepts, semiconductor basics, amplifiers, oscillators, RF, telecommunications and finishes on antennas.

At the end of each chapter is a straightforward quiz (multiple choice) to make sure you are on top of concepts.

This is the best-written technical book on novice to moderately advanced electronics we have seen.

Read this book and understand it - you are a serious techo.

- Dimensions: 230 x 185mm.



↑	Cat	Qty 1+
	BM-7106	\$36.95

Soft cover, 468 pages

INFRARED LEDs

INFRARED LEDs - TRANSMITTERS

3mm EMITTING DIODE

With a blue transparent lens. Similar specifications as our ZD-1945.

Specifications	ZD-1946
Forward current (If)	50mA
Peak forward current (Ip)	100mA
Forward voltage (VF)	1.3V
Power dissipation (Pd)	100mW max



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1946	\$1.50	\$1.35	\$1.05

5mm EMITTING DIODE

With a blue transparent lens.



Specifications			
Forward current (If)	50mA max	Peak spectral wavelength (IR)	940nm@20mA
Peak forward current (Ip)	1.2A	Spectral bandwidth (DI)	50nm@20mA
Forward voltage (VF)	1.2V @ 20mA	Reverse voltage (VR)	5V max
Power dissipation (Pd)	100mW max	Viewing angle	30°
		Material	GaAs

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1945	\$1.50	\$1.35	\$1.05

INFRARED LEDs - RECEIVERS

BP104 PHOTODIODE

Small square device measuring 4(W) x 5.4(L) x 2(D)mm.



Specifications			
Reverse voltage	20V max	Forward voltage	1.3V@100mA
Spectral sensitivity	34uA @ 5V	Wavelength of max. sens	950nm
Spectral range of sensitivity	800 to 1100nm	Half angle	+/- 60°
Dark current	2nA @ 10V	Open-circuit voltage	330mV
Short-circuit current	17uA	Rise and fall time	20ns @ 5V
Capacitance	48pF	Cathode marking	flag on leg

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1947	\$4.35	\$3.90	\$2.95

5MM PHOTODIODE

Radiant sensitive area (receiving) is on the side of the device. Size 6.7(H) x 4.8(W)mm.

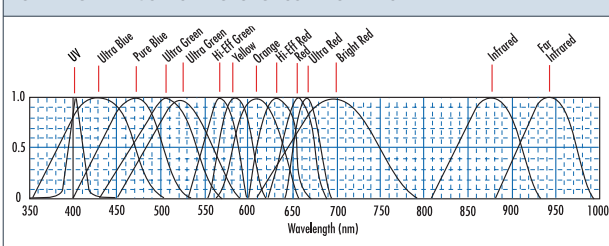


Specifications	ZD-1948
Reverse voltage	32V
Spectral range of sensitivity	970nm
Reverse dark current	5nA
Turn on/off time (typical)	50ns
Capacitance	25pF
Open-circuit voltage	350mV

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1948	\$1.50	\$1.35	\$1.05

TECH TALK!

NORMALISED FREQUENCY RESPONSE CURVE OF LED CAPABILITY



INFRARED PHOTOTRANSISTOR

5mm LED with a clear transparent lens.



- Collector: Short leg
- Emitter: Long leg

Specifications			
NPN collector-to-emitter b'down voltage	30V	Collector dark current	100nA@10V(Vce)
Emitter-to-collector breakdown voltage	5V	Rise and fall time	3uS @ 5V(Vce)
Collector-to-emitter saturation voltage	0.8V max	Power dissipation	100mW max

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1950	\$1.50	\$1.35	\$1.05

IR LED RECEIVER

Consists of an infrared photo diode and signal processing circuitry, (amplifier, limiter, bandpass filter & demodulator). It will detect the modulated pulse from an IR Remote Control & give a TTL level output.

- Data sheet available - see website.

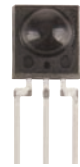


Specifications			
Supply voltage	5V typ.	Supply voltage max	5.5V
Current consumption	0.95mA	Arrival distance Length	12m typ.
Center frequency	37.9kHz	Directivity characteristics	
Horizontal	45°	Vertical:	35°

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1952	\$7.95	\$7.10	\$5.50

TSOP4136 IR RECEIVER

Consists of PIN diode, pre-amplifier, AGC, pass filter, and demodulator. The main benefits are high speed data rates, short burst transmission codes, and suits cable TV remotes.



Specifications	ZD-1953
Supply voltage	4.5-5.5V
Supply voltage max	6V
Current consumption	1.2mA
Arrival distance length	20m
Centre frequency	36kHz
Directivity characteristics	Horizontal 45°, Vertical 45°

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZD-1953	\$2.75	\$2.45	\$1.90

LASERS

10MW LASER DIODE

10mW laser diode component, red in colour & supplied with 7mm dia collimating lens.



Specifications			
Threshold current	24mA	LD reverse voltage	2V PD
Operating voltage	2.4V	Reverse voltage	30V
Operating current	40mA	Size	TO-18 (5.6mm dia)
Optical power	10mW		

↑	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
	TO-18	ZD-1955	\$7.95	\$7.10	\$5.50

WIRELESS SYSTEMS

433MHZ WIRELESS MODULES

These are pre-built 433MHz wireless transmitter / receiver modules. They feature ASK encoding and are ideal for devices using short data bursts such as remote controls, trigger pulses etc.



Specifications	Transmitter Module	Receiver Modules
Output power	3dBm.	
Supply voltage	3VDC	5VDC
Supply current	10mA max	10mA max
Data rate	300bps to 10kbps	300bps to 10kbps
PCB measures	18.5(H) x 14.5(W)mm (excl. pins)	42(H) x 11(W)mm (excl. pins)

⬆	Cat.	Qty 1+	Qty 10+	Qty 25+
Transmitter	ZW-3100	\$13.95	\$12.35	\$10.95
Receiver	ZW-3102	\$13.95	\$12.35	\$10.95

LET'S FIND EVERYTHING YOU NEED!

FROM
\$4.45
HB-6011



ENCLOSURES P123

FROM
\$5.95
QM-1502



MULTIMETERS P148

FROM
\$24.95
TS-1651



SOLDERING IRON KIT P173

FROM
\$16.95
TH-1987



PCB HOLDER P177

FROM
\$54.95
QM-3544



MAGNIFYING LAMP P144

TRANSDUCERS

ULTRASONIC TRANSDUCER

- Compact and lightweight
- High sound pressure level
- Low power consumption
- High sensitivity, reliability & stability
- Transmitter & receiver in one unit

Application:

- Parking sensors
- Proximity sensor
- Motion detector
- Automatic doors
- Intruder alarm
- Water level meter



Specifications:		Input voltage	140V
Frequency	40kHz	Operating temperature	-40°C to +85°C
Transmitting sound pressure	>105dB		
Receiving sensitivity	>-74dB		

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	AU-5550	\$6.95	\$6.25	\$5.50

ULTRASONIC TRANSDUCER

Ultrasonic transducer as used in Silicon Chip projects such as the ultrasonic cleaner and boat antifouling. See website for data sheets.

Specifications	AU-5556
Static capacitance	3000pF
Resonant frequency	40kHz
Bandwidth	3.9kHz
Impedance	15 ohms
Insulated impedance	1000M ohms
Power	50 Watt



↑	Cat.	Qty 1+
50 Watt - 40kHz	AU-5556	\$29.95

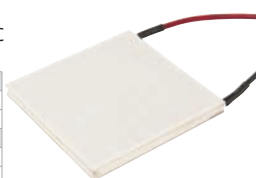
PELTIER MODULES

THERMOELECTRIC (PELTIER) MODULES

These are a solid-state devices which operate as a heat pump to transfer heat utilising the Peltier effect. Suitable for cooling or heating applications up to 100°C.

- Measures: 40 x 40 mm with lead wires
- Temperature differential (DT) (Th=27°C): >=68°C
- Optimum input voltage (Vmax) (Th=27°C): 15V

33.4W ZP-9100	
Optimum input current (Imax) (Th=27°C)	4A
Maximum cooling power (Qmax)	33.4W
51.4W ZP-9102	
Optimum input current (Imax) (Th=27°C)	6A
Maximum cooling power (Qmax)	51.4W
68.09W ZP-9104	
Optimum input current (Imax) (Th=27°C)	8A
Maximum cooling power (Qmax)	68.09W



↑	Cooling Power	Cat.	Qty 1+	Qty 10+	Qty 25+
	33.4W	ZP-9100	\$18.95	\$16.95	\$14.95
	51.4W	ZP-9102	\$18.95	\$16.95	\$14.95
	68.09W	ZP-9104	\$23.95	\$21.35	\$18.95

VALVE SOCKETS

VALVE SOCKETS

9 PIN:

This unit is moulded from high grade thermosetting resin. The pins are adequately plated and have deep solder terminals, sufficient for several hard wiring points per pin. Sturdy flange mount is meant for fitting above the chassis.

8 PIN:

Made from similar materials to above, but with moulded key.

- Can be mounted above or below the chassis.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
9 Pin	PS-2082	\$6.95	\$6.25	\$5.50
8 Pin	PS-2080	\$7.95	\$7.10	\$6.25

TECH TALK!

FREE INFORMATION SERVICE

For several years now we have been writing 'primers' - short technical articles on a topic - to help people use our products more easily. Usually they are between 2 and 6 pages long, contain text and relevant illustrations. They are freely available on our website. You can, for example, learn how to make an FM 'trap' to improve TV and FM radio reception, learn how to connect a LED across 240V safely, have the latest video interface formats explained, etc. We hold copyright on these and you must seek our permission in writing to use them for any other purpose than your personal consumption. To access this service go to www.jaycar.com.au/buyingguides

SMART CARDS/PROGRAMMERS

WAFER CARDS

With PIC16F84A + 24LC16B Inbuilt (GOLD). This is a multi-chip 'smart card' based on the PIC 16F84A and is coupled with a 24LC16B EEPROM, and compatible with most reader/programmer units available.



- 16K memory.
- ISO 7816-1 compatible pin-out and card body
- DC to 10 MHz operating speed
- Reprogrammable with code protection
- 1024 x 14 on-chip programmable memory
- 64 x 8 internal EEPROM memory
- Enhanced code protection
- Greater than 1,000,000 Write/ Erase cycles

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Gold	ZZ-8800	\$11.95	\$10.70	\$8.25

SEE OUR SMART CARD READER / PROGRAMMER KIT ON PAGE 57.

TRANSISTORS

MULTI-REPLACEMENT COMMON TRANSISTORS

Two transistors which will replace a multitude of common hard to get devices. Both are TO-92 package.



Type	Polarity	Case	Vce	Ic	hFE min/max
PN100	NPN	TO-92	45V	500	80-600
PN200	PNP	TO-92	45V	500	80-600

PN100

NPN general purpose medium power amp and switch with continuous collector current up to 500mA. PN100 replaces PN2221, PN2222, PN2222A, PN3565, PN3568, PN3569, PN3643, PN5133, 2N2219A, 2N2222A, 2N3414, 2N3415, 2N3416, 2N3417, 2N3700, 2N3704, 2N3904, 2N4123, 2N4124, 2N4401, 2N5088 and 2N5210.

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	ZT-2283	\$0.40	\$0.36	\$0.28

PN200

PNP general purpose amplifier at collector currents to 500mA.

PN200 replaces PN2907, PN2907A, PN3638, PN3638A, PN3640, PN3644, PN4121, PN4143, PN4248, PN4249, PN4250, PN4355, PN4916, PN4917, PN5910, 2N2905A, 2N3467, 2N3702, 2N3906, 2N4125, 2N4126, 2N4291, 2N4402, 2N4403, 2N5086, 2N5087, 2N5447

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	ZT-2284	\$0.40	\$0.36	\$0.28

PROTOTYPE PACK

TRANSISTOR PACK

100 mixed BC series transistors.

More of the common types.

- 15 x BC547
- 15 x BC548
- 20 x BC549
- 15 x BC557
- 15 x BC558
- 15 x BC559



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	ZT-2170	\$16.95	\$14.95	\$11.70

SMD TRANSISTOR PACKS

BC817

- NPN
- SOT23-3
- 45V

Cat. ZT-2118

BC807

- PNP
- SOT23-3
- 45V

Cat. ZT-2121



NEW 2015

↑	Type	Pack	Cat.	Qty 1+	Qty 10+	Qty 50+
	BC817	10	ZT-2118	\$1.95	\$1.75	\$1.35
	BC807	10	ZT-2121	\$1.95	\$1.75	\$1.35

SILICON BIPOLAR TRANSISTORS - MAJOR BRANDS ONLY

- Major brands only
- Resin moulded or hermetic metal cases.



TO-264



TO-218



TO-220



TO-218



TO-126



TO-92



TO-3



TO-39

Type	Polarity	Case	P _D @25°C	V _C	I _C	h _{FE} min/max @ I _C cont.		Cat.	Qty 1 +	Qty 10 +	Qty 25 +
BC327	PNP	TO-92	625mW	50	800mA	100/630	100mA	ZT-2110	\$0.48	\$0.43	\$0.34
BC328	PNP	TO-92	625mW	30	800mA	100/630	100mA	ZT-2112	\$0.48	\$0.43	\$0.34
BC337	NPN	TO-92	625mW	50	800mA	100/630	100mA	ZT-2115	\$0.48	\$0.43	\$0.34
BC338	NPN	TO-92	625mW	30	800mA	100/630	100mA	ZT-2116	\$0.48	\$0.43	\$0.34
BC639	NPN	TO-92	830mW	80	1A	63/250	150mA	ZT-2179	\$0.95	\$0.85	\$0.65
BC546	NPN	TO-92	500mW	80	100mA	110/220	2mA	ZT-2150	\$0.30	\$0.27	\$0.21
BC547	NPN	TO-92	500mW	50	100mA	110/800	2mA	ZT-2152	\$0.30	\$0.27	\$0.21
BC548	NPN	TO-92	500mW	30	100mA	110/800	2mA	ZT-2154	\$0.30	\$0.27	\$0.21
BC549	NPN	TO-92	500mW	30	100mA	110/800	2mA	ZT-2156	\$0.30	\$0.27	\$0.21
BC550	NPN	TO-92	500mW	50	100mA	110/800	2mA	ZT-2160	\$0.38	\$0.34	\$0.27
BC556	PNP	TO-92	500mW	80	100mA	125/475	2mA	ZT-2162	\$0.38	\$0.34	\$0.27
BC557	PNP	TO-92	500mW	50	100mA	125/800	2mA	ZT-2164	\$0.30	\$0.27	\$0.21
BC558	PNP	TO-92	500mW	30	100mA	110/800	2mA	ZT-2166	\$0.30	\$0.27	\$0.21
BC559	PNP	TO-92	500mW	30	100mA	110/800	2mA	ZT-2168	\$0.30	\$0.27	\$0.21
BC640	PNP	TO-92	830mW	100	1A	63/250	150mA	ZT-2180	\$0.95	\$0.85	\$0.65
BD135	NPN	TO-126	8W	40	1.5A	63/250	150mA	ZT-2187	\$1.50	\$1.35	\$1.05
BD136	PNP	TO-126	8W	40	1.5A	63/250	150mA	ZT-2188	\$1.50	\$1.35	\$1.05
BD139	NPN	TO-126	8W	80	1.5A	63/250	150mA	ZT-2189	\$1.15	\$1.00	\$0.80
BD140	PNP	TO-126	8W	80	1.5A	63/250	150mA	ZT-2190	\$1.15	\$1.00	\$0.80
BD649	* NPN	TO-220	60W	100	8A	750	3A	ZT-2198	\$2.85	\$2.53	\$1.95
BD650	* PNP	TO-220	60W	100	8A	750	3A	ZT-2199	\$2.85	\$2.53	\$1.95
BD681	* NPN	TO-126	40W	100	4A	750	1.5A	ZT-2193	\$2.25	\$2.00	\$1.55
BD682	* PNP	TO-126	40W	100	4A	750	1.5A	ZT-2192	\$2.25	\$2.00	\$1.55
BF469	NPN	TO-126	1.8W	250	100mA	50	25mA	ZT-2200	\$2.45	\$2.21	\$1.95
BF470	PNP	TO-126	1.8W	250	100mA	50	25mA	ZT-2202	\$2.45	\$2.21	\$1.95

Type	Polarity	Case	P _D @25°C	V _C	I _C	h _{FE} min/max @ I _C cont.		Cat.	Qty 1+	Qty 10+	Qty 25+
MJ10012*	NPN	TO-3	175W	600	10A	300	3A	ZT-2222	\$14.50	\$12.35	\$9.75
MJL21193	PNP	TO-3P	200W	250	16A	25/75	8A	ZT-2227	\$14.50	\$12.35	\$9.75
MJL21194	NPN	TO-3P	200W	250	16A	25/75	8A	ZT-2228	\$14.50	\$12.35	\$9.75
MJ15003	NPN	TO-3	250W	140	20A	25/150	5A	ZT-2230	\$9.50	\$8.50	\$6.60
MJ15004	PNP	TO-3	250W	140	20A	25/150	5A	ZT-2231	\$9.50	\$8.50	\$6.60
MJ2955	PNP	TO-3	115W	100	15A	5	10A	ZT-2235	\$3.45	\$3.05	\$2.35
MJE340	NPN	TO-126	20W	300	500mA	30/240	50mA	ZT-2255	\$2.95	\$2.60	\$2.00
MJE350	PNP	TO-126	20W	300	500mA	30/240	50mA	ZT-2260	\$2.95	\$2.60	\$2.00
MJE2955	PNP	TO-220	75W	70	10A	20/100	4A	ZT-2275	\$2.75	\$2.45	\$1.90
MJE3055	NPN	TO-220	75W	70	10A	20/70	4A	ZT-2280	\$2.75	\$2.45	\$1.90
MP5A06	NPN	TO-92	625mW	80	500mA	100	10mA	ZT-2286	\$0.50	\$0.45	\$0.35
MP5A13*	NPN	TO-92	625mW	30	500mA	5000	10mA	ZT-2287	\$0.50	\$0.45	\$0.35
NJL1302D	PNP	TO-264	200W	260	25A	75/150	15A	ZT-2237	\$8.95	\$7.95	\$6.25
NJL3281D	NPN	TO-264	200W	260	25A	75/150	15A	ZT-2236	\$8.95	\$7.95	\$6.25
TIP2955	PNP	SOT-93	90W	100	15A	20/70	4A	ZT-2270	\$3.45	\$3.05	\$2.35
TIP3055	NPN	SOT-93	90W	100	15A	20/70	4A	ZT-2278	\$3.45	\$3.05	\$2.35
TIP31	NPN	TO-220	40W	40	3A	25/50	1A	ZT-2285	\$1.85	\$1.65	\$1.25
TIP32	PNP	TO-220	40W	40	3A	25/50	1A	ZT-2290	\$1.85	\$1.65	\$1.25
TIP35C	NPN	TO-218	125W	100	25A	15/75	15A	ZT-2293	\$5.95	\$5.25	\$4.15
TIP36C	PNP	TO-218	125W	100	25A	15/75	15	ZT-2294	\$5.95	\$5.25	\$4.15
TIP41C	NPN	TO-220	65W	100	6A	15/75	3A	ZT-2291	\$2.15	\$1.90	\$1.50
TIP42C	PNP	TO-220	65W	100	6A	15/75	3A	ZT-2289	\$2.15	\$1.90	\$1.50
TIP122	* NPN	TO-220	65W	100	5A	1000	3A	ZT-2292	\$2.15	\$1.90	\$1.50

Type	Polarity	Case	P _D @25°C	V _C	I _C	h _{FE} min/max @ I _C cont.		Cat.	Qty 1 +	Qty 10 +	Qty 25 +
2N2222A	NPN	TO-92	1.8W	75	800mA	100/300	150mA	ZT-2298	\$0.40	\$0.36	\$0.28
2N2907	PNP	TO-92	400mW	40	600mA	100/300	150mA	ZT-2322	\$1.15	\$1.00	\$0.80
2N3053	NPN	TO-39	1W	60	700mA	50/250	150mA	ZT-2299	\$1.15	\$1.00	\$0.80
2N3055	NPN	TO-3	115W	100	15A	20/70	4A	ZT-2300	\$2.95	\$2.60	\$2.00
2N3638	PNP	TO-92	300mW	25	500mA	30/130	30mA	ZT-2320	\$1.65	\$1.45	\$1.15
2N3773	NPN	TO-3	150W	160	16A	15/60	8A	ZT-2324	\$9.95	\$8.75	\$6.75
2N3904	NPN	TO-92	625mW	60	200mA	70	1mA	ZT-2326	\$0.75	\$0.68	\$0.53
2N3906	PNP	TO-92	625mW	40	200mA	80	1mA	ZT-2328	\$0.75	\$0.68	\$0.53

* Denotes Darlington type

Data representative only. Please download the manufacturers data sheet if values are critical.

TRANSISTORS, FETS & MOUNTING HARDWARE

TRANSISTOR CLAMPS

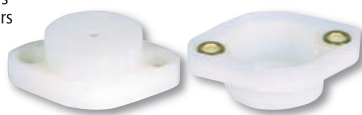
- To clamp TO-220 devices to a heatsink.



↑ Type	Pkt	Cat.	Qty 1+	Qty 10+	Qty 50+
Dual TO-220	ea	HH-8610	\$1.45	\$1.30	\$1.15
Single TO-220	10	HH-8600	\$8.95	\$7.95	\$6.95
Single TO-220	100	HH-8602	\$24.95	\$22.35	\$19.70
Dual TO-220	100	HH-8607	\$19.95	\$17.70	\$13.70

FULL TO-3 INSULATING CAP

Ideal for insulating 'live' transistors or for simply keeping prying fingers away from potentially dangerous transistor cases.



- Fastens to the transistor
- Has a single ventilation hole to decrease chance of overheating.

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ZM-9904	\$1.70	\$1.50	\$1.15

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.



*ABN will be required - see our website or Store Manager for further details.

TRANSISTOR INSULATION KITS

SILICONE RUBBER TRANSISTOR INSULATORS

Silicone impregnated rubber washers. Stop using messy silicone grease. These washers are made from silicone rubber and are as effective as mica and grease.

Physical Properties:	
Colour	grey
Tensile strength	40kg/cm2
Elongation	80%
Dielectric breakdown voltage	4000/0.3mm
Co-efficient of thermal conductance	2.4 x 10-3
Flammability class	94V-0/0.3mm
Dimensional stability	0.2% change/0.3mm



HP-1150

↑ Type	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
TO-3	20	HP-1150	\$12.50	\$10.70	\$9.50
TO-220	20	HP-1155	\$6.95	\$6.25	\$5.50
TO-220	100	HP-1156	\$17.95	\$15.95	\$14.35

Bushes to suit silicone impregnated rubber washers & mica washers TO220 - Pkt 100

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	HP-1166	\$9.95	\$8.75	\$6.75

SILICONE RUBBER INSULATING KITS

HP-1172



HP-1174

↑ Type	Washers	Bushes	Cat.	Qty 1+	Qty 10+	Qty 25+
TO-3	4	8	HP-1172	\$3.75	\$3.30	\$2.60
TO-3P	4	4	HP-1174	\$3.75	\$3.30	\$2.60
TO-220	4	4	HP-1176	\$3.50	\$3.15	\$2.45

TO-3 & TO-220 MICA INSULATING KITS

Mica washers and bushes



↑ Type	Pkt	Cat.	Qty 1+	Qty 10+	Qty 25+
TO-3	4	HP-1122	\$3.50	\$3.15	\$2.45
TO-220	4	HP-1142	\$1.95	\$1.75	\$1.35
TO-220	100	HP-1140	\$14.95	\$13.35	\$10.35

ADHESIVE TRANSISTOR MOUNTING WASHER KITS

Adhesive silicone washers with good thermal conductivity. Makes installation of transistors a snap! Complete kit supplied including washer and bushes.



↑ Type	Cat.	Qty 1+	Qty 4+	Qty 10+
TO-220	HP-1160	\$9.50	\$8.50	\$7.50
TO-3	HP-1161	\$9.50	\$8.50	\$7.50
TO-3P	HP-1162	\$9.50	\$8.50	\$7.50

MOSFETS, FETS, UJTS

MOSFETS, FETS, UJTS

- Major brands



UJTS

Type	Voltage	Description	Pack	Cat.	Qty 1+	Qty 10+	Qty 25+
2N2646	30V	UJT PN 300mW	TO-5	ZT-2297	\$6.50	\$5.75	\$4.45
2N6027	40V	UJT Programmable 300mW	TO-92	ZT-2397	\$1.95	\$1.75	\$1.35

FETS

Type	Voltage	Current	Description	Pack	Cat.	Qty 1+	Qty 10+	Qty 25+
2N5484	25V	10mA	JFET N-Ch VHF/UHF Amp	TO-92	ZT-2375	\$1.95	\$1.75	\$1.35
2N7000	60V	20mA	FET D-MOS N-Ch Relay Driver	TO-92	ZT-2400	\$0.75	\$0.68	\$0.53
MPF102	25V	10mA	JFET N-Ch VHF Amp	TO-92	ZT-2262	\$1.75	\$1.55	\$1.20
MPF106/2N5485	25V	10mA	JFET N-Ch VHF/UHF Amp	TO-92	ZT-2266	\$2.45	\$2.21	\$1.70
STP60NF06/BUK456-60	60V	60A	FET N-Ch Power	TO-220	ZT-2450	\$9.95	\$8.75	\$6.75
VN10KM	60V	300mA	FET N-Ch	TO-92	ZT-2452	\$4.95	\$4.45	\$3.45

MOSFETS

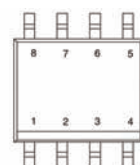
Type	Voltage	Current	Description	Pack	Cat.	Qty 1+	Qty 10+	Qty 25+
2SK1058	160V	7A	MOSFET N-Ch Power	TO-3P	ZT-2460	\$23.95	\$21.35	\$16.70
2SJ162	160V	7A	MOSFET P-Ch Power	TO-3P	ZT-2465	\$23.95	\$21.35	\$16.70
BUZ71	50V	14A	MOSFET N-Ch Power	TO-220	ZT-2225	\$4.95	\$4.45	\$3.45
IRF9540N	100V	23A	MOSFET P-Ch Power	TO-220	ZT-2467	\$5.95	\$5.25	\$4.15
IRF1405N	55V	169A	MOSFET N-Ch Automotive	TO-220	ZT-2468	\$5.95	\$5.25	\$4.15
IRF540N	100V	33A	MOSFET N-Ch Power	TO-220	ZT-2466	\$5.95	\$5.25	\$4.15
STP16NE06	60V	16A	MOSFET N-Ch Power	TO-220	ZT-2277	\$2.95	\$2.60	\$2.00
SUP53P06-20	60V	53A	MOSFET P-Ch	TO-220	ZT-2464	\$5.95	\$5.25	\$4.15



SEE OUR RANGE OF HEATSINKS ON PAGE 113.

DUAL N-CHANNEL 30V MOSFET - SI4944DY

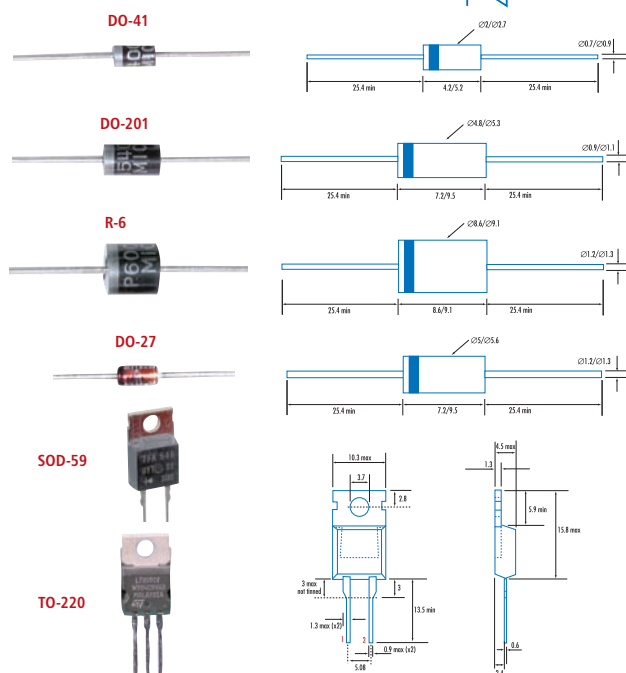
This handy dual N-channel MOSFET can be used in many projects such as DC-DC conversion and switching circuits. They have extremely low on-resistance ($r_{DS(on)}$ 0.016Ω $V_{GS} = 4.5V$) and fast switching/low capacitance. They are very useful as analog switches as well as the traditional uses for MOSFETs eg, relay driving, LED driving, etc.



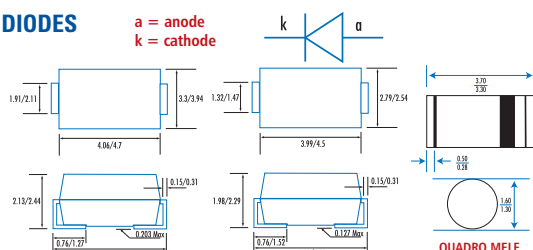
Type	Case	Pkt	Cat.	Qty 1+	Qty 10+	Qty 25+
SI4944DY	SOIC8	EA	ZK-8821	\$5.50	\$4.90	\$3.75

GENERAL DIODES

STANDARD DIODES



SMD DIODES



THROUGH HOLE DIODES • SSR = Standard Silicon Rectifier

Type	Description	Case	Pkt	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
1N4004	SSR	400V 1A	DO-41	4	ZR-1004	\$0.70	\$0.53
1N4004		400V 1A	DO-41	100	ZR-1005	\$7.95	\$5.90
1N4007	SSR	1000V 1A	DO-41	4	ZR-1007	\$0.80	\$0.60
1N4007		1000V 1A	DO-41	100	ZR-1008	\$12.95	\$9.50
1N4934	SSR	100V 1A	DO-41	10	ZR-1001	\$3.95	\$2.90
1N5404	SSR	400V 3A	DO-27	ea	ZR-1014	\$0.35	\$0.26
1N5404		400V 3A	DO-27	100	ZR-1015	\$11.95	\$8.75
1N5408	SSR	1000V 3A	DO-27	ea	ZR-1018	\$0.40	\$0.30
1N5408		1000V 3A	DO-27	100	ZR-1017	\$14.95	\$10.95
1N5711	Schottky	70V 15mA	DO-35	ea	ZR-1027	\$0.80	\$0.60
1N5819	Schottky	40V 1A	DO-41	ea	ZR-1020	\$0.80	\$0.60
1N5822	Schottky	40V 3A	DO-201	ea	ZR-1048	\$1.15	\$0.80
1N5822		40V 3A	DO-27	10	ZR-1023	\$6.95	\$5.35
1N914/1N4148	Signal	100V 150mA	DO-27	5	ZR-1100	\$0.60	\$0.45
1N914/1N4148		100V 150mA	DO-27	100	ZR-1105	\$5.95	\$4.45
6A1/P600B	SSR	100V 6A	R-6	10	ZR-1041	\$13.95	\$10.50
6A4/P600G	SSR	400V 6A	R-6	10	ZR-1044	\$13.95	\$10.50
6A10/P600M	SSR	1000V 6A	R-6	ea	ZR-1024	\$2.25	\$1.65
BAT46/48	Schottky	100V 150mA	DO-27	ea	ZR-1141	\$1.50	\$1.10
BY229	Fast	600V 8A	SOD-59	ea	ZR-1028	\$6.95	\$5.35
FR302	Fast	100V 3A	DO-201	10	ZR-1050	\$3.45	\$2.55
FR307	Fast	1000V 3A	DO-201	10	ZR-1052	\$3.45	\$2.55
FR607	Fast	1000V 6A	R-6	10	ZR-1054	\$16.95	\$12.75
MBR20100CT	DbI Schottky	100V 20A	TO-220	ea	ZR-1039	\$2.50	\$2.20
MBR735	Schottky	35V 7A	TO-220	ea	ZR-1029	\$1.75	\$1.30
SF37	Super fast	600V 3A	DO-27	10	ZR-1090	\$7.95	\$5.90
UF4003	Ultrafast	200V 1A	DO-41	ea	ZR-1034	\$1.15	\$0.80
UF4004	Ultrafast	400V 1A	DO-41	ea	ZR-1036	\$1.50	\$1.10
UF4007	Ultrafast	1000V 1A	DO-41	ea	ZR-1038	\$2.00	\$1.45

SURFACE MOUNT DIODES

• Sold as a pack of 10

Type	Description	Case	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
1N914/1N4148	100V 150mA	QUADRO MELF	ZR-1103	\$6.95	\$5.35	\$3.75
SM4004A	400V 1A	DO-214AC	ZR-1003	\$5.95	\$4.45	\$3.15
SM4007A	1000V 1A	DO-214AC	ZR-1009	\$2.95		
SM4934A	100V 1A	DO-214AC	ZR-1070	\$6.95	\$5.35	\$3.75
SM5819A	Schottky	40V 1A	DO-214AC	ZR-1021	\$6.95	\$5.35
SM5822B	Schottky	40V 3A	DO-214AA	ZR-1025	\$6.95	\$5.35



ZENER DIODES

1 WATT ZENER DIODES*

ABSOLUTE MAXIMUM RATINGS	
Power dissipation	1W
Derate above 50°C	6.67mW/°C
Storage temperature range	-65°C to +200°C
Operating junction temperature	+200°C
Thermal resistance junction to lead	53.5°C/W
Thermal resistance junction to ambient	100°C/W
Lead temperature (1/16" from case for 10 seconds)	230°C
Surge power*	10W
Case Size	DO-41

*Non-recurrent square wave PW=8.3ms, TA=55°C

Note 1: ratings are based on max junction temperature of 200°C

Note 2: These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Type	Voltage	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
1N4728	3V3	ZR-1398	\$0.65	\$0.59	\$0.46
1N4729	3V6	ZR-1399	\$0.65	\$0.59	\$0.46
1N4730	3V9	ZR-1400	\$0.65	\$0.59	\$0.46
1N4731	4V3	ZR-1401	\$0.65	\$0.59	\$0.46
1N4732	4V7	ZR-1402	\$0.65	\$0.59	\$0.46

5 WATT ZENER DIODES

1N53XXB Series Silicon Zener Diodes are a high quality voltage regulator for use in industrial, commercial, entertainment and computer applications.

ABSOLUTE MAXIMUM RATINGS	
Power dissipation (@TL=75°C)	5 Watts
Operating and storage temperature	-65°C to +200°C
Tolerance "B Suffix"	+5%

a = anode
k = cathode



a = anode
k = cathode

Type	Voltage	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
1N4733	5V1	ZR-1403	\$0.65	\$0.59	\$0.46
1N4734	5V6	ZR-1404	\$0.65	\$0.59	\$0.46
1N4735	6V2	ZR-1405	\$0.65	\$0.59	\$0.46
1N4736	6V8	ZR-1406	\$0.65	\$0.59	\$0.46
1N4737	7V5	ZR-1407	\$0.65	\$0.59	\$0.46
1N4738	8V2	ZR-1408	\$0.65	\$0.59	\$0.46
1N4739	9V1	ZR-1409	\$0.65	\$0.59	\$0.46
1N4740	10V	ZR-1410	\$0.65	\$0.59	\$0.46
1N4741	11V	ZR-1411	\$0.65	\$0.59	\$0.46
1N4742	12V	ZR-1412	\$0.65	\$0.59	\$0.46
1N4743	13V	ZR-1413	\$0.65	\$0.59	\$0.46
1N4744	15V	ZR-1415	\$0.65	\$0.59	\$0.46
1N4745	16V	ZR-1416	\$0.65	\$0.59	\$0.46
1N4746	18V	ZR-1418	\$0.65	\$0.59	\$0.46
1N4747	20V	ZR-1420	\$0.65	\$0.59	\$0.46
1N4748	22V	ZR-1422	\$0.65	\$0.59	\$0.46
1N4749	24V	ZR-1424	\$0.65	\$0.59	\$0.46
1N4750	27V	ZR-1427	\$0.65	\$0.59	\$0.46
1N4751	30V	ZR-1430	\$0.65	\$0.59	\$0.46
1N4752	33V	ZR-1433	\$0.65	\$0.59	\$0.46
1N4753	36V	ZR-1436	\$0.65	\$0.59	\$0.46
1N4754	39V	ZR-1439	\$0.65	\$0.59	\$0.46
1N4761	75V	ZR-1475	\$0.95	\$0.85	\$0.65

Type	Voltage	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
1N5352B	15V	ZR-1450	\$1.75	\$1.55	\$1.20
1N5349B	12V	ZR-1440	\$1.75	\$1.55	\$1.20
1N5374B	75V	ZR-1480	\$1.75	\$1.55	\$1.20

RECTIFIERS & REGULATORS

BRIDGE RECTIFIERS

ZR-1304

ZR-1324

ZR-1314
 A=15.3mm
 B=8.8mm
 C=9.1mm
 E=6.4mm
 F=ø4mm

ZR-1320
 A=19.6mm
 B=13.2mm
 C=13.2mm
 E=7.5mm
 F=ø6mm

ZR-1308

ZR-1360

ZR-1362

ZR-1350

BRIDGE RECTIFIERS

Type	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
DB104	400V	1A	ZR-1308	\$1.25	\$0.90	\$0.65
W04	400V	1.2A	ZR-1304	\$0.85	\$0.64	\$0.47
BR64	400V	6A	ZR-1314	\$2.50	\$1.85	\$1.35
BR106	600V	10A	ZR-1320	\$2.85	\$2.10	\$1.50
MB354	400V	35A	ZR-1324	\$5.50	\$4.10	\$3.00

INLINE BRIDGE RECTIFIERS

Type	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
RS206	800V	2A	ZR-1350	\$2.25	\$1.65	\$1.20
KBU604	400V	6A	ZR-1360	\$3.35	\$2.45	\$1.80
GBU806	800V	8A	ZR-1362	\$3.95	\$2.90	\$2.10

VOLTAGE REGULATORS

TO-220 package
78xx 1A fixed
voltage
regulator (+)
1 - input
2 - common
(ground)
3 - output
4 - common

TO-220 package
317T 1.5A
adjustable voltage
regulator (+)
1 - adjust
2 - output
3 - input
4 - output

TO-220 package
79xx fixed voltage
regulator (-)
1 - common
(ground)
2 - input
3 - output
4 - input

TO-220 package
337T voltage
regulator (-)
1 - adjust
2 - input
3 - output
4 - input

Connections for the TO-3
LM317K, LM338K & LM350K
(viewed from bottom)

Connections for
TO-92 78LXX
(viewed from bottom)

STANDARD VOLTAGE REGULATORS

Type	Vout	Iout	Case	Cat.	Qty 1+	Qty 10+	Qty 25+
7805/LM340T5	+5V	1A	TO-220	ZV-1505	\$1.85	\$1.65	\$1.25
7806/LM340T6	+6V	1A	TO-220	ZV-1506	\$1.85	\$1.65	\$1.25
7808/LM340T8	+8V	1A	TO-220	ZV-1508	\$1.85	\$1.65	\$1.25
7809/LM340T9	+9V	1A	TO-220	ZV-1509	\$1.85	\$1.65	\$1.25
7812/LM340T12	+12V	1A	TO-220	ZV-1512	\$1.85	\$1.65	\$1.25
7815/LM340T15	+15V	1A	TO-220	ZV-1515	\$1.85	\$1.65	\$1.25
7824/LM340T24	+24V	1A	TO-220	ZV-1524	\$1.85	\$1.65	\$1.25
78L05	+5V	100mA	TO-92	ZV-1539	\$1.50	\$1.35	\$1.05
78L12	+12V	100mA	TO-92	ZV-1542	\$1.50	\$1.35	\$1.05
7905/LM320T5	-5V	1A	TO-220	ZV-1525	\$1.85	\$1.65	\$1.25
7909/LM320T9	-9V	1A	TO-220	ZV-1530	\$1.85	\$1.65	\$1.25
7912/LM320T12	-12V	1A	TO-220	ZV-1532	\$1.85	\$1.65	\$1.25
7915/LM320T15	-15V	1A	TO-220	ZV-1535	\$1.85	\$1.65	\$1.25
LM317K	+1.2 to +37V	1.5A	TO-3	ZV-1610	\$6.95	\$6.25	\$4.75
LM317T	+1.2 to +37V	1.5A	TO-220	ZV-1615	\$2.95	\$2.60	\$2.00
LM337T	-1.2 to -37V	1.5A	TO-220	ZV-1620	\$4.25	\$3.75	\$2.95
LM338K	+1.2 to +32V	5A	TO-3	ZV-1630	\$16.95	\$14.95	\$11.70
LM350K	+1.2 to +33V	3A	TO-3	ZV-1635	\$17.95	\$15.95	\$12.35
LM723CN	+2.0 to +37V	150mA	DIP14	ZV-1676	\$2.25	\$2.00	\$1.55
MC78T12	+12V	3A	TO-220	ZV-1634	\$4.95	\$4.45	\$3.45

SWITCHING VOLTAGE REGULATORS

Type		Vout	Iout	Case	Cat.	Qty 1+	Qty 10+	Qty 25+
LM2576T-ADJ	Stepdown	+1.23 to +37V	3A	TO-220	ZV-1640	\$16.95	\$14.95	\$11.70
LM2577T-12	Stepup	+12V	3A	TO-220	ZV-1642	\$16.95	\$14.95	\$11.70
LM2678T-5.0	Stepdown	+5V	5A	TO-220	ZV-1636	\$16.95	\$14.95	\$11.70
LM2678T-12	Stepdown	+12V	5A	TO-220	ZV-1637	\$16.95	\$14.95	\$11.70
TL499ACP	Controller	+2.9 to +30V	100mA	DIP8	ZV-1644	\$3.95	\$3.50	\$2.75

LOW DROPOUT REGULATORS

Type	Description	Case	Vin (Typ)	Vout	Iout (max)	Vdrop (Vout-Vin)	Cat.	Qty 1+	Qty 10+	Qty 25+
LM3940	Fixed voltage	TO-220	4.5 to 5.5V	+3.3V	1.0A	500mV at 1A	ZV-1565	\$3.95	\$3.50	\$2.75
LM2936-3.3	Ultra low quiescent current	TO-92	4.0 to 26V	+3.3V	50mA	200mV at 50mA	ZV-1650	\$4.35	\$3.90	\$2.95
LP2951ACN	Micropower adjustable voltage	DIP8	2.0 to 30V	+1.24 to +29V	100mA	380mV at 100mA	ZV-1646	\$2.50	\$2.20	\$1.75
LM2940CT-5.0	Fixed voltage	TO-220	6.25 to 26V	+5V	1.0A	500mV at 1A	ZV-1560	\$8.65	\$7.50	\$5.75
LM2940CT-12	Fixed voltage	TO-220	13.6 to 26V	+12V	1.0A	500mV at 1A	ZV-1562	\$8.65	\$7.50	\$5.75
LM2936-5.0	Ultra low quiescent current	TO-92	5.5 to 26V	+5V	50mA	200mV at 50mA	ZV-1652	\$4.35	\$3.90	\$2.95
LM1085IT-12	Fixed voltage, high current	TO-220	13.5 to 25V	+12V	3.0A	1.3V at 3A	ZV-1564	\$8.95	\$7.95	\$6.25
LP2950ACZ-5.0	Micropower fixed voltage	TO-92	6.0 to 30V	+5V	100mA	380mV at 100mA	ZV-1645	\$1.85	\$1.65	\$1.25
MCP1703-5002E/CB	Ultra low quiescent current	SOT-23	5.33 to 16V	+5V	250mA	330mV at 250mA	ZV-1545	\$23.95	\$21.35	\$16.70

LET'S FIND EVERYTHING YOU NEED!

FROM
\$59.95
TS-1620



SOLDERING STATIONS P170

FROM
\$5.95
QM-1502



TEST EQUIPMENT P148

FROM
\$4.50
HP-9540



PROTOTYPING BOARDS P27

FROM
\$11.95
TH-1897

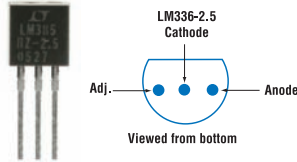


TOOLS P131

VOLTAGE REFERENCE DIODES

Provides a stable 2.5V reference point for circuitry and can be used to make portable meters, regulators or general purpose analog circuitry.

The LM285Z-2.5 can enable circuits to operate with battery life approaching shelf life. This is one of the lowest current devices of any discrete voltage references available.



Type	Vref	If (min)	Case	Cat.	Qty 1+	Qty 10+	Qty 25+
LM336-2.5	2.5V	10mA	TO-92	ZV-1624	\$3.95	\$3.50	\$2.75

SCR'S / TRIAC'S / DIAC'S

SCRs

SILICON CONTROLLED RECTIFIERS - Reverse blocking thyristors glassivated PNPN devices designed for high volume consumer applications such as temperature, light and speed control, process and remote control and warning systems where reliability of operation is important.

- Glassivated surface for reliability and uniformity
- Power rated at economical prices • Sensitive gate triggering
- Practical level triggering and holding characteristics
- Flat, rugged, thermopad construction for low thermal resistance, high heat dissipation and durability.



Type	Vmax	IE(A)	VF(V)	IG(μA)	VG(V)	Hold In(mA)	Cat.
BT169D	400	0.8	1.2	50	0.5	2	ZX-7010
C106D1	400	4	2.2	200	0.8	3	ZX-7006
C122E / MCR8M / BT151	500	8	1.8	25mA	1	30	ZX-7012

↑	Voltage	Cat.	Qty 1+	Qty 10+	Qty 25+
BT169D	400V	ZX-7010	\$2.95	\$2.60	\$2.00
C106D1	400V	ZX-7006	\$2.95	\$2.60	\$2.00
C122E / MCR8M / BT151	500V	ZX-7012	\$5.50	\$4.90	\$3.75

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here!
Check our website for over
3,500 pages of data!



TRIACS

Type	Vmax	IE(A)	VF(V)	IG(mA)	VG(V)	Hold In(mA)	Cat.
SC141D	400	6	2	50	2.5	50	ZX-7141
SC151D	400	15	1.6	50	2	50	ZX-7145
TAG225	400	5	2	25	2.5	25	ZX-7147
BT137X	600	8	1.65	25	1.5	<20	ZX-7149*

*Note: ZX-7149 is isotab - mounting tab is dielectrically isolated.

↑	Voltage	Cat.	Qty 1+	Qty 10+	Qty 25+
SC141D	400V	ZX-7141	\$4.95	\$4.45	\$3.45
SC151D	400V	ZX-7145	\$6.50	\$5.75	\$4.45
TAG225	400V	ZX-7147	\$3.95	\$3.50	\$2.75
BT137X	600V	ZX-7149	\$3.75	\$3.30	\$2.60

DIAC

- Will trigger most devices above with a suitable timing circuit (DO-41)

Type	VCO	IFmax	ISW	VSW	Cat.	Qty 1+	Qty 10+	Qty 25+
ST2	3.5V	5mA	27	35V	ZX-7192	\$1.85	\$1.65	\$1.25

THERMISTORS

NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS

These devices are made of a special ceramic material which changes resistance value rapidly with temperature increase. They are commonly used to check thermal runaway in bipolar transistor amplifiers etc, but really have dozens of other uses. They are rugged and very reliable.

- Resistance at 25°C +/- 10%
- Temperature Range -20°C ~ +125°C
- Radial type, dipped epoxy
- Type-NTC Ceramic material with tinned copper lead
- Dissipation (MAX) 500mW
- Case 5mm diameter
- Thermal dissipation constant: 6mW/°C



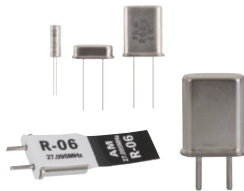
CRYSTALS

CRYSTALS

Freq Tolerance: +/- 30Hz per 1MHz.
Operating Temp: -20 to +70°C. Load Capac: 30pF typ.
Note: Will be stocking low profile case types when oldstock is exhausted.

RC CRYSTAL TX/RX

- Used in remote control circuits
- Supplied as a pair



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
27.095MHz	RQ-5275	\$9.95	\$8.75	\$7.75
27.125MHz	RQ-5276	\$9.95	\$8.75	\$7.75
27.145MHz	RQ-5277	\$9.95	\$8.75	\$7.75
27.175MHz	RQ-5278	\$9.95	\$8.75	\$7.75
27.195MHz	RQ-5279	\$9.95	\$8.75	\$7.75

Freq.(MHz)	WxDxH(mm)	Case	Max ESR	Cat.	Qty 1+	Qty 10+	Qty 25+
2.00	11.05 x 4.65 x 13.46	HC49U	500Ω	RQ-5268	\$4.50	\$3.95	\$3.60
3.2768	11.05 x 4.65 x 13.46	HC49U	90Ω	RQ-5271	\$4.50	\$3.95	\$3.60
3.5795	11.05 x 4.65 x 13.46	HC49U	90Ω	RQ-5272	\$4.50	\$3.95	\$3.60
4.000	11.05 x 4.65 x 13.46	HC49U	70Ω	RQ-5274	\$4.50	\$3.95	\$3.60
4.433619	11.05 x 4.65 x 13.46	HC49U	70Ω	RQ-5284	\$4.50	\$3.95	\$3.60
6.00	11.05 x 4.65 x 13.46	HC49U	60Ω	RQ-5285	\$4.50	\$3.95	\$3.60
8.00	11.05 x 4.65 x 13.46	HC49U	30Ω	RQ-5287	\$4.50	\$3.95	\$3.60
10.00 (P)	11.05 x 4.65 x 13.46	HC49U	30Ω	RQ-5289	\$4.50	\$3.95	\$3.60
12.00	11.05 x 4.65 x 13.46	HL49U	30Ω	RQ-5293	\$4.50	\$3.95	\$3.60
20.00	11.05 x 4.65 x 13.46	HC49U	25Ω	RQ-5299	\$4.50	\$3.95	\$3.60
32.768kHz	3.1 x 3.1 x 8	DT38	35kΩ	RQ-5297	\$4.50	\$3.95	\$3.60
38kHz Mini	3 x 8.5		40Ω	RQ-5298	\$4.50	\$3.95	\$3.60

LET'S FIND EVERYTHING YOU NEED!

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\$16.95
TH-1987



SERVICE AIDS

P177

FROM
\$43.95
PB-8816



BREADBOARDS

P25

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\$0.85
HH-8502



HEATSINKS

P113

FROM
\$3.75
HP-1174



TRANSISTOR INSULATORS

P78

RESISTORS

0.25W CARBON FILM

5% , available from 1Ω to 8.2Ω & 1.2MΩ to 10MΩ.
Use Mini Metal Film for other values.

Pkt 8 (one value)	Qty 1 +	Qty 25 +	Qty 100 +
	\$0.48	\$0.34	\$0.29

0.5W 1% METAL FILM MINI SIZE

Same size as standard 1/4W Carbon Film.

Pkt 8 (one value)	Qty 1 +	Qty 25 +	Qty 100 +
	\$0.55	\$0.39	\$0.33

1W CARBON FILM 5%

Pkt 2 (one value)	Qty 1 +	Qty 25 +	Qty 100 +
	\$0.48	\$0.34	\$0.29

5W WIREWOUND

Each (one value)	Qty 1 +	Qty 25 +	Qty 100 +
	\$0.48	\$0.34	\$0.29

10W WIREWOUND

Each (one value)	Qty 1 +	Qty 25 +	Qty 100 +
	\$1.80	\$1.25	\$1.05

WELWYN OPEN AIR RESISTOR

OAR3-R010FI OR010 3W 1%



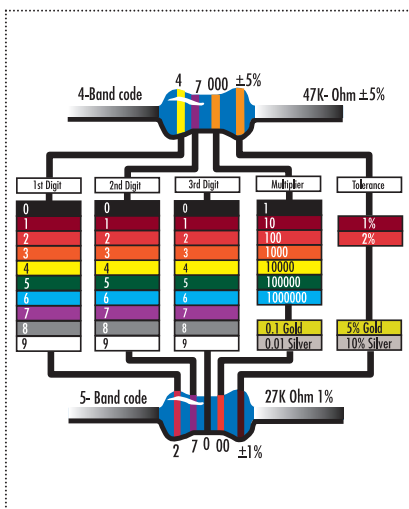
This is used as a PCB mount current shunt/sense (resistor) up to about 20A. It is a very stable (extremely low temp drift), high tolerance (1%), low inductance (<10nH) shunt resistor that can be used in many high current sense applications: motor current sense, regulated power supplies, power amplifier current sense, battery current sense. See website for datasheet.

• Sold individually

Specifications	
Power	3W
Resistance	0.01ohm
Tolerance	+/- 1%
Dimensions	15.2(L) x 25.4(H)mm



↑ Cat.	Qty 1 +	Qty 25 +	Qty 100 +
RR-3420	\$2.25	\$1.55	\$1.35



	1% Metal A (1/2W)	5% Carbon B (1/4W)	5% Carbon C (1W)	5% Wirewound D (5W)	5% Wirewound E (10W)	1% Metal A (1/2W)	5% Carbon B (1/4W)	5% Carbon C (1W)
OR0		RR-1500				5K1	RR-0589	
OR1				RR-3206		5K6	RR-0590	RR-2792
OR22				RR-3208		6K2	RR-0591	
OR47				RR-3214		6K8	RR-0592	RR-2794
OR75						7K5	RR-0593	
OR82						8K2	RR-0594	RR-2796
1R0		RR-1502	RR-2502	RR-3220	RR-3340	9K1	RR-0595	
1R2		RR-1504	RR-2504			10K	RR-0596	RR-2798
1R5		RR-1506	RR-2506	RR-3230		11K	RR-0597	
1R8		RR-1508	RR-2508	RR-3232		12K	RR-0598	RR-2800
2R2		RR-1510	RR-2510	RR-3234	RR-3344	13K	RR-0599	
2R7		RR-1512	RR-2512	RR-3236		15K	RR-0600	RR-2802
3R3		RR-1514	RR-2514	RR-3238	RR-3346	16K	RR-0601	
3R9		RR-1516	RR-2516	RR-3240	RR-3347	18K	RR-0602	RR-2804
4R7		RR-1518	RR-2518	RR-3242	RR-3348	20K	RR-0603	
5R6		RR-1520	RR-2520	RR-3244	RR-3349	22K	RR-0604	RR-2806
6R8		RR-1522	RR-2522	RR-3246	RR-3350	24K	RR-0605	
8R2		RR-1524	RR-2524	RR-3248	RR-3351	27K	RR-0606	RR-2808
10R	RR-0524		RR-2526	RR-3250	RR-3352	30K	RR-0607	
11R	RR-0525					33K	RR-0608	RR-2810
12R	RR-0526		RR-2528	RR-3252	RR-3353	36K	RR-0609	
13R	RR-0527					39K	RR-0610	RR-2812
15R	RR-0528		RR-2530	RR-3254	RR-3354	43K	RR-0611	
16R	RR-0529					47K	RR-0612	RR-2814
18R	RR-0530		RR-2532	RR-3256	RR-3355	51K	RR-0613	
20R	RR-0531					56K	RR-0614	RR-2816
22R	RR-0532		RR-2534	RR-3258	RR-3356	62K	RR-0615	
24R	RR-0533					68K	RR-0616	RR-2818
27R	RR-0534		RR-2536	RR-3260	RR-3357	75K	RR-0617	
30R	RR-0535					82K	RR-0618	RR-2820
33R	RR-0536		RR-2538	RR-3262		91K	RR-0619	
36R	RR-0537					100K	RR-0620	RR-2822
39R	RR-0538		RR-2540	RR-3264		110K	RR-0621	
43R	RR-0539					120K	RR-0622	RR-2824
47R	RR-0540		RR-2542	RR-3266	RR-3360	130K	RR-0623	
51R	RR-0541					150K	RR-0624	RR-2826
56R	RR-0542		RR-2544	RR-3268		160K	RR-0625	
62R	RR-0543					180K	RR-0626	RR-2828
68R	RR-0544		RR-2546	RR-3270	RR-3362	200K	RR-0627	
75R	RR-0545					220K	RR-0628	RR-2830
82R	RR-0546		RR-2548	RR-3272		240K	RR-0629	
91R	RR-0547					270K	RR-0630	RR-2832
100R	RR-0548		RR-2550	RR-3274	RR-3364	300K	RR-0631	
110R	RR-0549					330K	RR-0632	RR-2834
120R	RR-0550		RR-2552	RR-3276		360K	RR-0633	
130R	RR-0551					390K	RR-0634	RR-2836
150R	RR-0552		RR-2554	RR-3278		430K	RR-0635	
160R	RR-0553					470K	RR-0636	RR-2838
180R	RR-0554		RR-2556	RR-3280		510K	RR-0637	
200R	RR-0555					560K	RR-0638	RR-2840
220R	RR-0556		RR-2558	RR-3282		620K	RR-0639	
240R	RR-0557					680K	RR-0640	RR-2842
270R	RR-0558		RR-2760	RR-3284	RR-3369	750K	RR-0641	
300R	RR-0559					820K	RR-0642	RR-2844
330R	RR-0560		RR-2762	RR-3286		910K	RR-0643	
360R	RR-0561					1M0	RR-0644	RR-2846
390R	RR-0562		RR-2764	RR-3288		1M2		RR-1650
430R	RR-0563					1M5		RR-1652
470R	RR-0564		RR-2766	RR-3290	RR-3372	1M8		RR-1654
510R	RR-0565					2M2		RR-1656
560R	RR-0566		RR-2768	RR-3292		2M7		RR-1658
620R	RR-0567					3M3		RR-1660
680R	RR-0568		RR-2770	RR-3294		3M9		RR-1662
750R	RR-0569					4M7		RR-1664
820R	RR-0570		RR-2772	RR-3296	RR-3375	5M6		RR-1666
910R	RR-0571					6M8		RR-1668
1K0	RR-0572		RR-2774	RR-3298		8M2		RR-1670
1K1	RR-0573					10M	RR-0660	RR-1672
1K2	RR-0574		RR-2776					RR-2870
1K3	RR-0575							
1K5	RR-0576		RR-2778	RR-3302				
1K6	RR-0577							
1K8	RR-0578		RR-2780					
2K0	RR-0579							
2K2	RR-0580		RR-2782	RR-3306				
2K4	RR-0581							
2K7	RR-0582		RR-2784					
3K0	RR-0583							
3K3	RR-0584		RR-2786	RR-3310				
3K6	RR-0585							
3K9	RR-0586		RR-2788					
4K3	RR-0587							
4K7	RR-0588		RR-2790	RR-3312				

**BUY A LOT OF RESISTORS?
CHECK OUT OUR ECONOMICAL
PACK DEALS ON THE NEXT
PAGE.**

**SELECTING A RESISTOR TO
POWER A LED?
SEE PAGE 70 - 71 FOR OUR
SELECTION GUIDE.**

PROTOTYPE RESISTOR PACKS

0.25 WATT CARBON FILM RESISTORS

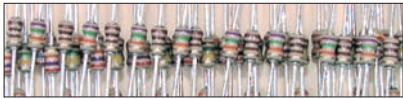
300 Pieces



This pack includes five of virtually each value from 1 Ω to 10 Meg. Sixty different values. All resistors are banded for easy sorting. Values supplied are 1 Ω , 1.5, 2.2, 3.3, 4.7, 5.6, 10, 12, 15, 22, 27, 33, 39, 47, 56, 68, 82, 100, 120, 180, 220, 270, 330, 470, 560, 680, 820, 1k, 1k2, 1k5, 1k8, 2k2, 3k3, 3k9, 4k7, 5k6, 8k2, 10k, 12k, 15k, 18k, 22k, 27k, 33k, 39k, 47k, 56k, 68k, 82k, 100k, 120k, 150k, 220k, 270k, 330k, 470k, 1M, 2M7, 4M7 & 10M.

↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	RR-1680	\$8.95	\$6.25	\$5.25

ULTIMATE RESISTOR PACK

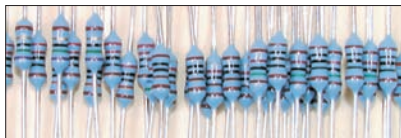


Top quality, guaranteed 1/4 watt 5% miniature sized carbon film. In fact, they look like 1/8W, they are so small. This pack gives you almost every resistor in the E24 range (eg. 1.8K, 2.0K, 2.2K). You get 10 of every value, a total of 170 values, 1700 resistors in all and they are banded for easy sorting.

Buy this pack and you should NEVER be short of any resistor again. Massive savings over normal costs.

↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	RR-2000	\$32.95	\$24.95	\$19.95

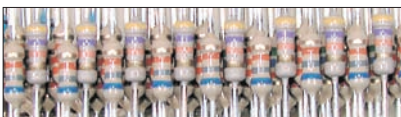
0.5W 1% MINI SIZE METAL FILM PACK



This pack includes five of each value from 10 Ω to 1 Meg. Have that 1% resistor when you need it. Five of each of the following values supplied. 10 Ω , 12, 15, 22, 27, 33, 39, 47, 56, 68, 75, 82, 100, 120, 180, 220, 270, 330, 390, 470, 560, 680, 820, 910, 1k, 1k2, 1k8, 2k2, 3k3, 3k9, 4k7, 5k6, 6k8, 8k2, 10k, 12k, 15k, 18k, 22k, 27k, 33k, 39k, 47k, 56k, 68k, 82k, 91k, 100k, 120k, 150k, 180k, 200k, 220k, 270k, 330k, 390k, 470k, 560k, 750k & 1M. Total 60 values - 300 resistors. You know exactly what you are getting when you buy our resistor packs.

↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	RR-0680	\$16.95	\$11.70	\$9.95

THE EASY WAY TO BUY 0.25 WATT CARBON FILM RESISTORS



This pack includes 10 of every value of 1/4W 5% carbon film resistors from 1 Ω to 10M Ω . This is the E12 range, which goes like this - 10, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82, 100. Total values supplied is 85, giving a total of 850 resistors. Resistors are banded for easy sorting. A great way to never be out of that odd resistor and save a packet at the same time.

↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	RR-1697	\$16.95	\$11.70	\$9.95

RESISTOR SUBSTITUTION WHEEL

36 VALUES

Convenient resistance selection. Select from 36 values ranging from 5 ohms to 1 megaohms.

- Great for creating new circuits for selecting the best resistances for the task
- Assists with some of the calculations associated with resistance usage
- Comes complete with leads and insulated alligator clips.
- Uses 0.25W resistors with 5% tolerance

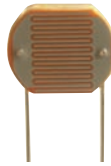


↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	RR-0700	\$29.95	\$20.70	\$17.70

LIGHT DEPENDENT RESISTOR (LDR)

Cadmium sulphide (CdS) light dependent resistor cell.

Specifications	
Dark resistance	0.5M ohm min.
Light resistance	2.8k ohm min. 8.4k ohm max.
Max dissipation	100mW
Rise time	(0-63%) 50mS
Decay time	(100 - 37%) 40mS
Dimensions	8.5mm x 10.14mm
Lead spacing	7.68mm.

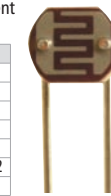


↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	RD-3485	\$3.25	\$2.25	\$1.90

LIGHT DEPENDENT RESISTOR (LDR)

Cadmium Sulphide (CdS) light dependent resistor cell. Similar to Philips ORP12

Specifications	
Dark resistance	min10M Ω
Light resistance	48k - 140k Ω
Max dissipation	30mW
Rise time	(0~63%) 40mS
Decay time	(100~37%) 10mS
Dimensions	5.1mm x 4.3mm \pm 0.2
Lead spacing	3.4mm



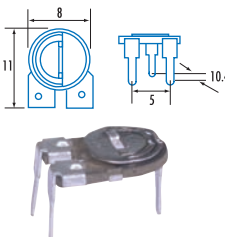
↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	RD-3480	\$3.25	\$2.25	\$1.90

TRIMPOTS

HORIZONTAL MINI TRIMPOTS

OPEN CARBON TYPE

Value	Cat.
500 Ω	RT-4304
1k Ω	RT-4306
2k Ω	RT-4308
5k Ω	RT-4310
10k Ω	RT-4312
20k Ω	RT-4314
50k Ω	RT-4316
100k Ω	RT-4318
200k Ω	RT-4320
500k Ω	RT-4324

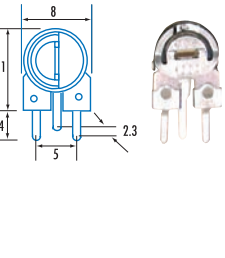


↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	All Types / Each	\$0.50	\$0.35	\$0.30

VERTICAL TRIMPOTS 5MM

OPEN CARBON TYPE

Value	Cat.
200 Ω	RT-4006
500 Ω	RT-4008
1k Ω	RT-4010
5k Ω	RT-4014
10k Ω	RT-4016
20k Ω	RT-4018
50k Ω	RT-4020
100k Ω	RT-4022
250k Ω	RT-4024
500k Ω	RT-4026
1M Ω	RT-4028
2M Ω	RT-4029

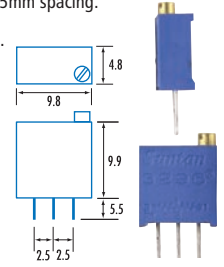


↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	All Types / Each	\$0.50	\$0.35	\$0.30

25 TURN CERMET (3296W)

These are 25 turn industrial quality sealed trimpots. Pins are in a row, with 2.5mm spacing. Adjustment is vertical. Power rating is 0.5 watts.

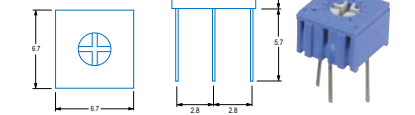
Value Ω	Cat.
100	RT-4640
500	RT-4642
1K	RT-4644
2K	RT-4646
5K	RT-4648
10K	RT-4650
20K	RT-4652
50K	RT-4654
100K	RT-4656
1M	RT-4658



↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	All Types / Each	\$2.95	\$2.00	\$1.75

TRIMPOT CERMET 1 TURN 10K Ω (3386P)

- Single turn
- 10k Ω
- 10% tolerance

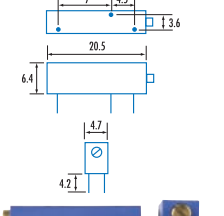


↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	RT-4600	\$1.85	\$1.25	\$1.10

MULTITURN CERMET (3006P)

0.75 watts @ 70%. Horizontal side adjustment. • 15-20 turns.

Value Ω	Cat.
100	RT-4602
500	RT-4604
1k	RT-4608
2k	RT-4610
5k	RT-4612
10k	RT-4614
20k	RT-4616
50k	RT-4618
100k	RT-4620
1M	RT-4622



Major brands stocked

↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	All Types / Each	\$1.95	\$1.35	\$1.15

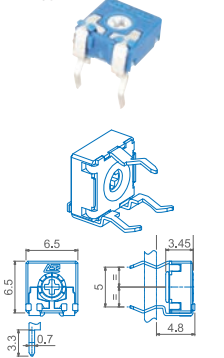
FOR TRIMMER CAPACITORS SEE PAGE 86.

PIHER STYLE HORIZONTAL 5MM

At last, a range of top quality sealed mini, standard sized trimpots.

- Dust proof enclosure
- Polyester substrate
- Wiper positioned at 50%
- Accidental rotor movement protected.
- Max voltage 100V / Nom power 0.1W
- Linear curve
- Tolerance +/- 30%
- End resistance 10 Ω carbon type.

Value Ω	Cat.
200	RT-4350
500	RT-4352
1K	RT-4354
2K	RT-4356
5K	RT-4358
10K	RT-4360
20K	RT-4362
50K	RT-4364
100K	RT-4366
250K	RT-4368
500K	RT-4370
1M	RT-4372



↑	Cat.	Qty 1+	Qty 25+	Qty 100+
↑	All Types / Each	\$1.35	\$0.90	\$0.80

PLASTIC KNOBS



FLUTED PLASTIC WITH POINTER SLOT AND SKIRT
Grubscrew fixing - brass insert. Suit 0.25"/6.35mm shaft.



↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	16 x 14	HK-7760	\$1.65	\$1.45	\$1.30
Black	20 x 16	HK-7762	\$2.15	\$1.90	\$1.70
Black	24 x 20	HK-7764	\$2.50	\$2.20	\$2.05
Black	35 x 19	HK-7766	\$3.45	\$3.05	\$2.75

PUSH ON - COLOURED CAP
Suit 0.25"/6.35mm shaft.

↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Red	18 x 20	HK-7705	\$0.95	\$0.85	\$0.75
Yellow	18 x 20	HK-7713	\$0.95	\$0.85	\$0.75
Black	18 x 20	HK-7707	\$0.95	\$0.85	\$0.75
White	18 x 20	HK-7715	\$0.95	\$0.85	\$0.75
Blue	18 x 20	HK-7709	\$0.95	\$0.85	\$0.75
Grey	18 x 20	HK-7717	\$0.95	\$0.85	\$0.75
Green	18 x 20	HK-7711	\$0.95	\$0.85	\$0.75

BLACK PLASTIC WITH POINTER
Brass ferrule insert. Suit 0.25"/6.35mm shaft.

↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	23 x 14	HK-7787	\$1.85	\$1.65	\$1.45



**LIFETIME WARRANTY
ON ALL KNOBS!**



METRIC

Suits our 9mm Mini Potentiometers. Matches HK-7760/66 series.
Fits all standard metric shafts, including RP-8504 series, RP-8610 series & RP-8706 series on page 81.

↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	15 x 14	HK-7770	\$1.75	\$1.55	\$1.40
Black	20 x 16	HK-7772	\$2.15	\$1.90	\$1.70

SKIRT NUMBERED 1-10

Grubscrew fixing - brass ferrule insert. Suit 0.25"/6.35mm shaft.

↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Silver/Black	29 x 18	HK-7788	\$3.45	\$3.05	\$2.75
Silver/Black	36 x 23.5	HK-7549	\$3.45	\$3.05	\$2.75

PUSH ON - 18T SPLINE

Suits our 9mm Mini Potentiometers. Matches HK-7760/66 series.
Fits all standard metric shafts.

↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Grey/Red	13 x 18	HK-7730	\$1.15	\$1.00	\$0.90
Grey/Yellow	13 x 18	HK-7731	\$1.15	\$1.00	\$0.90
Grey/Green	13 x 18	HK-7732	\$1.15	\$1.00	\$0.90
Grey/Blue	13 x 18	HK-7733	\$1.15	\$1.00	\$0.90
Grey/White	13 x 18	HK-7734	\$1.15	\$1.00	\$0.90

PLASTIC POINTER

Suit 0.25"/6.35mm shaft.

↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	19 x 32	HK-7700	\$1.65	\$1.45	\$1.30

ALUMINIUM / PLASTIC INSERT KNOBS



BRUSHED ALUMINIUM

Ideal for HiFi projects. Suit 0.25"/6.35mm shaft.



↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Silver	16 x 14	HK-7020	\$3.45	\$3.05	\$2.75
Silver	22 x 14	HK-7022	\$3.65	\$3.25	\$2.90

BLACK ANODISED ALUMINIUM

Grub screw fixing. Suit 0.25"/6.35mm shaft.

↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	16 x 14	HK-7009	\$3.45	\$3.05	\$2.75
Black	22 x 14	HK-7010	\$3.65	\$3.25	\$2.90
Black	29 x 14	HK-7011	\$4.95	\$4.45	\$3.90



BLACK PLASTIC WITH ALUMINIUM INSERT

White pointers - brass insert.
Grub screw fixing.
Suit 0.25"/6.35mm shaft.



↑ Colour	Ø x H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Silver/Black	20 x 18	HK-7786	\$2.85	\$2.53	\$2.23
Silver/Black	27 x 15	HK-7740	\$1.85	\$1.65	\$1.45
Silver/Black	32 x 17	HK-7741	\$2.45	\$2.21	\$1.95
Silver/Black	45 x 20	HK-7742	\$4.65	\$4.15	\$3.65

TECH TALK!

CAUTION

When ordering knobs (from any supplier) double check that the knob you are getting will fit the shaft of the component you are using it with. For example a knob with a 6mm shaft hole will not accept a 1/4" shaft. As you are probably aware 1/4" equals 6.35mm. That 0.35mm is enough to render the knob unusable. So called "metric" knobs often have an 18 spline interference fit hole suitable only for push-on type aluminium shafts.

Note: Apart from metric, all knobs shown on this page fix to 0.25"/6.35mm shafts (with flat) unless otherwise stated.

CUSTOMERS PLEASE NOTE! TECHSTORE SPECIALS

SUPER BARGAINS ONLY AVAILABLE
THROUGH TECHSTORE

MORE INFO
WEB

Many of you who see our regular ads have made personal visits for some products not available to shop customers. These products are usually in such short supply there is simply not enough to distribute to all stores.

Indeed some items could be as few as half a dozen.

Such goods are sold through our "TECHSTORE".

When we advertise these products, we box them in a special section marked off with

'TECHSTORE ONLY - NOT AVAILABLE IN RETAIL STORES'.

Unfortunately many do not notice this and become angry when the product is not in their local store.

Please do not blame the local manager for this, he has no control, nor can he transfer stock from the TECHSTORE to his shop for you. If you wish to buy these items you must hurry and order direct to the TECHSTORE.

POTENTIOMETERS

9MM SQUARE PCB MOUNTING

These pots are rapidly becoming the industry standard for miniaturised audio, digital and telecommunications equipment. This series features good solder bath immersion resistance, 300° rotation and standard 18 tooth metric pre-cut actuator shafts. Two popular metric knobs are now carried, however metric knobs are now commonly available. Both single and dual gang types are stocked in log and linear resistance tapers.

Electrical	Linear Taper (B)	Other Taper	Mechanical	
Rated Wattage	0.05W	0.02W	Rotation Angle:	300° +/-5°
Rated Voltage	50VAC	50VAC	Rotation Torque:	20~250gf.cm
Slider Noise	<100mV		Shaft Stop Strength:	5kgf.cm/min.
Insulation Resistance	>100MΩ at 250VDC			
Dielectric	300VAC/Minute			
Tracking Error	Within 3dB at 40~0dB			

LOG SINGLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10k	RP-8610	\$3.50	\$2.75	\$2.45
50k	RP-8616	\$3.50	\$2.75	\$2.45

LINEAR SINGLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
1k	RP-8504	\$3.50	\$2.75	\$2.45
10k	RP-8510	\$3.50	\$2.75	\$2.45
50k	RP-8516	\$3.50	\$2.75	\$2.45
100k	RP-8518	\$3.50	\$2.75	\$2.45
1M	RP-8524	\$3.50	\$2.75	\$2.45

+ SUITABLE KNOBS ARE HK-7770/72 SHOWN ON PAGE 84

LOG DOUBLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10k	RP-8756	\$4.95	\$3.90	\$3.45
50k	RP-8760	\$4.95	\$3.90	\$3.45

LINEAR DOUBLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10k	RP-8706	\$4.95	\$3.90	\$3.45
50k	RP-8710	\$4.95	\$3.90	\$3.45
100k	RP-8712	\$4.95	\$3.90	\$3.45

16MM PCB MOUNTING

These pots have imperial standard shaft.

- Shaft is 1/4" D type (30% of shaft has been removed for flat), so they suit all our knob range.
- Shaft length is 30mm.
- Power rating Linear 0.125W and Log 0.06W.
- Max operating voltage: 150VAC
- Supplied with nut and washer

LOG SINGLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
1K	RP-7604	\$2.50	\$2.05	\$1.75
10K	RP-7610	\$2.50	\$2.05	\$1.75
50K	RP-7616	\$2.50	\$2.05	\$1.75

LINEAR SINGLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
1K	RP-7504	\$2.50	\$2.05	\$1.75
5K	RP-7508	\$2.50	\$2.05	\$1.75
10K	RP-7510	\$2.50	\$2.05	\$1.75
50K	RP-7516	\$2.50	\$2.05	\$1.75
100K	RP-7518	\$2.50	\$2.05	\$1.75
1M	RP-7524	\$2.50	\$2.05	\$1.75

LOG DOUBLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10K	RP-7756	\$3.50	\$2.75	\$2.45

LINEAR DOUBLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
50K	RP-7708	\$3.50	\$2.75	\$2.45
100K	RP-7712	\$3.50	\$2.75	\$2.45

24MM PCB MOUNTING

With imperial standard shaft & bushings made to our rigid engineering specifications. The potentiometers are full size - 24mm diameter types. They have genuine 6.35mm (1/4") shafts with a flat machined 25% of the diameter for grub screws or interference fit knob mounting. The shaft is a generous 38mm long. The bush is a 3/8" 32 T.H.D. type which we believe is necessary for good fixing to a panel. Another important feature of the pots is their PCB mount capability. The pins are rigidly mounted on phenolic with the centre pin offset from the two outer terminals. When soldered into a PCB, the pot is quite rigidly held on its own. Double gang pots are held in 6 places and require no extra mechanical mounting assistance. The pins are large enough to terminate screened cable, etc., if the job requires hard wiring.

- We have stocked this product for over 10 years now and have no intention of changing it. You can therefore confidently design around this product.
- Supplied with nut and washer
- Power rating Log 0.25W and Linear 0.5W

LOG SINGLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
1k	RP-3604	\$2.95	\$2.40	\$2.00
5k	RP-3608	\$2.95	\$2.40	\$2.00
10k	RP-3610	\$2.95	\$2.40	\$2.00
25k	RP-3614	\$2.95	\$2.40	\$2.00
50k	RP-3616	\$2.95	\$2.40	\$2.00
100k	RP-3618	\$2.95	\$2.40	\$2.00
250k	RP-3620	\$2.95	\$2.40	\$2.00
500k	RP-3622	\$2.95	\$2.40	\$2.00
1M	RP-3624	\$2.95	\$2.40	\$2.00

LINEAR SINGLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
500R	RP-3502	\$2.95	\$2.40	\$2.00
1k	RP-3504	\$2.95	\$2.40	\$2.00
5k	RP-3508	\$2.95	\$2.40	\$2.00
10k	RP-3510	\$2.95	\$2.40	\$2.00
25k	RP-3514	\$2.95	\$2.40	\$2.00
50k	RP-3516	\$2.95	\$2.40	\$2.00
100k	RP-3518	\$2.95	\$2.40	\$2.00
250k	RP-3520	\$2.95	\$2.40	\$2.00
500k	RP-3522	\$2.95	\$2.40	\$2.00
1M	RP-3524	\$2.95	\$2.40	\$2.00

LOG DOUBLE GANG (A)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10k	RP-3756	\$4.50	\$3.60	\$3.15
50k	RP-3760	\$4.50	\$3.60	\$3.15
100k	RP-3762	\$4.50	\$3.60	\$3.15

LINEAR DOUBLE GANG (B)

Value	Cat.	Qty 1+	Qty 10+	Qty 50+
10k	RP-3706	\$4.50	\$3.60	\$3.15
25k	RP-3708	\$4.50	\$3.60	\$3.15
50k	RP-3710	\$4.50	\$3.60	\$3.15
100k	RP-3712	\$4.50	\$3.60	\$3.15

5 OHM 15W WIREWOUND

Specifications	
Resistance	5 Ohms
Resistance curve	Linear (B)
Rated wattage	15 Watts
Shaft	Spline (metric)
Body measures	41mm OD x 24mm Depth
Shaft Length	20mm; 9.0mm hole required
Lugs	Solder Type
Total rotation angle	300° +/-5°
Rotation Torque	70~400gf.cm
Stopper Strength	10kgf.cm

	Cat.	Qty 1+	Qty 10+	Qty 50+
	RP-3975	\$13.95	\$10.95	\$9.75

POTENTIOMETER NUTS

Packet of 12 nuts and washers to suit our pots.

	Thread	Cat.	Qty 1+	Qty 10+	Qty 50+
24mm	3/8" 32THTD	RP-3500	\$3.50	\$2.75	\$2.45
16mm	Metric	RP-7500	\$3.50	\$2.75	\$2.45

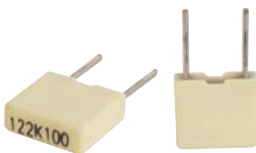
POLYESTER & TRIMMER CAPACITORS

CAPACITORS

100VDC MKT MINIATURE POLYESTER

- Rated voltage: 100VDC working, 40VAC 50/60Hz

Capacitance	Width	Depth	Height (mm)
0.001 - 0.08 μ F	7.5	2.5	6.5
0.10 - 0.22 μ F	7.5	3.2	8
0.27 - 0.56 μ F	7.5	5	8
0.68 μ F	7.5	6	9.6
1.5 μ F	26	7	16



Value (μ F)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.0010	1.0	5	RM-7010	\$0.35	\$0.24	\$0.21
0.0012	1.2	5	RM-7012	\$0.35	\$0.24	\$0.21
0.0015	1.5	5	RM-7015	\$0.35	\$0.24	\$0.21
0.0022	2.2	5	RM-7022	\$0.35	\$0.24	\$0.21
0.0027	2.7	5	RM-7027	\$0.35	\$0.24	\$0.21
0.0033	3.3	5	RM-7033	\$0.35	\$0.24	\$0.21
0.0039	3.9	5	RM-7039	\$0.35	\$0.24	\$0.21
0.0047	4.7	5	RM-7047	\$0.35	\$0.24	\$0.21
0.0068	6.8	5	RM-7055	\$0.35	\$0.24	\$0.21
0.010	10	5	RM-7065	\$0.35	\$0.24	\$0.21
0.012	12	5	RM-7070	\$0.35	\$0.24	\$0.21
0.015	15	5	RM-7075	\$0.35	\$0.24	\$0.21
0.018	18	5	RM-7080	\$0.35	\$0.24	\$0.21
0.022	22	5	RM-7085	\$0.35	\$0.24	\$0.21
0.033	33	5	RM-7095	\$0.35	\$0.24	\$0.21
0.039	39	5	RM-7100	\$0.35	\$0.24	\$0.21
0.047	47	5	RM-7105	\$0.35	\$0.24	\$0.21
0.056	56	5	RM-7110	\$0.35	\$0.24	\$0.21
0.068	68	5	RM-7115	\$0.35	\$0.24	\$0.21
0.082	82	5	RM-7120	\$0.40	\$0.27	\$0.24
0.10	100	5	RM-7125	\$0.40	\$0.27	\$0.24
0.12	120	5	RM-7130	\$0.40	\$0.27	\$0.24
0.15	150	5	RM-7135	\$0.45	\$0.30	\$0.25
0.18	180	5	RM-7140	\$0.45	\$0.30	\$0.25
0.22	220	5	RM-7145	\$0.45	\$0.30	\$0.25
0.27	270	5	RM-7150	\$0.65	\$0.45	\$0.37
0.33	330	5	RM-7153	\$0.65	\$0.45	\$0.37
0.39	390	5	RM-7159	\$0.65	\$0.45	\$0.37
0.47	470	5	RM-7165	\$0.65	\$0.45	\$0.37
0.56	560	5	RM-7166	\$0.85	\$0.57	\$0.50
0.68	680	5	RM-7168	\$0.85	\$0.57	\$0.50
1.00	1000	5	RM-7170	\$0.95	\$0.65	\$0.55
1.50	1500	23	RM-7172	\$1.25	\$0.85	\$0.75

250VDC METALLISED POLYPROPYLENE

- Ideal for speaker crossovers
- Axial

Metallised polypropylene dielectric offers stable capacitance over a wide temperature range. This, and the relatively high capacitance for size makes them ideal for high quality loudspeaker crossover networks. Naturally, they are also suitable for other applications where a stable, non polarised capacitive component is required.



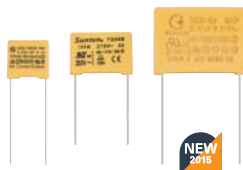
High Quality

Value (μ F)	W x D x H (mm)	Cat.	Qty 1+	Qty 5+	Qty 10+
1.0	25 x 15.9 x 8.4	RY-6950	\$3.95	\$2.75	\$2.30
1.5	29 x 17.2 x 9.6	RY-6951	\$4.95	\$3.95	\$3.45
2.2	32 x 19.2 x 10.1	RY-6952	\$5.65	\$4.60	\$4.15
3.3	32 x 22.2 x 13.0	RY-6953	\$7.95	\$6.25	\$5.50
4.7	32 x 22.0 x 15.0	RY-6954	\$12.50	\$8.75	\$7.75
5.6	46 x 20.0 x 12.0	RY-6955	\$13.50	\$9.75	\$8.75
6.8	46 x 22.2 x 14.3	RY-6956	\$14.50	\$11.35	\$10.35
8.2	46 x 23.0 x 16.0	RY-6957	\$17.95	\$13.35	\$11.70
10.	56 x 29.0 x 20.7	RY-6958	\$18.95	\$14.95	\$13.35

250VAC - METALLISED POLYPROPYLENE - X2 STYLE



Voltage rating: 275/250VAC
Capacitance tolerance: +/-10% std +/-5%
Operating temperature: -40°C to 85°C



Value (μ F)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.010	10	10	RG-5230	\$0.95	\$0.65	\$0.55
0.022	22	10	RG-5232	\$0.95	\$0.65	\$0.55
0.047	47	15	RG-5234	\$0.95	\$0.65	\$0.55
0.10	100	15	RG-5236	\$1.25	\$0.85	\$0.75
0.22	220	22.5	RG-5238	\$1.35	\$0.90	\$0.80
0.47	470	22.5	RG-5240	\$3.75	\$2.60	\$2.20
1.0	1000	27.5	RG-5248	\$4.25	\$2.90	\$2.45

GREENCAPS POLYESTER OR MYLAR

- Supplied loose
- Operating temperature: -40°C to +85°C



100VDC

Value (μ F)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.0010	1.0	4	RG-5010	\$0.30	\$0.21	\$0.18
0.0012	1.2	4	RG-5012	\$0.30	\$0.21	\$0.18
0.0015	1.5	4	RG-5015	\$0.30	\$0.21	\$0.18
0.0018	1.8	4	RG-5018	\$0.30	\$0.21	\$0.18
0.0022	2.2	4	RG-5022	\$0.30	\$0.21	\$0.18
0.0027	2.7	4	RG-5027	\$0.30	\$0.21	\$0.18
0.0033	3.3	4	RG-5033	\$0.30	\$0.21	\$0.18
0.0039	3.9	4	RG-5039	\$0.30	\$0.21	\$0.18
0.0047	4.7	4	RG-5047	\$0.30	\$0.21	\$0.18
0.0056	5.6	4	RG-5050	\$0.30	\$0.21	\$0.18
0.0068	6.8	4	RG-5055	\$0.30	\$0.21	\$0.18
0.0082	8.2	4	RG-5060	\$0.30	\$0.21	\$0.18
0.010	10	4	RG-5065	\$0.30	\$0.21	\$0.18
0.012	12	4	RG-5070	\$0.30	\$0.21	\$0.18
0.015	15	5	RG-5075	\$0.30	\$0.21	\$0.18
0.018	18	5	RG-5080	\$0.30	\$0.21	\$0.18
0.022	22	5	RG-5085	\$0.30	\$0.21	\$0.18
0.027	27	5	RG-5090	\$0.30	\$0.21	\$0.18
0.033	33	5	RG-5095	\$0.30	\$0.21	\$0.18
0.039	39	5	RG-5100	\$0.30	\$0.21	\$0.18
0.047	47	5	RG-5105	\$0.30	\$0.21	\$0.18
0.056	56	6	RG-5110	\$0.30	\$0.21	\$0.18
0.068	68	6.5	RG-5115	\$0.30	\$0.21	\$0.18
0.082	82	6.5	RG-5120	\$0.30	\$0.21	\$0.18
0.10	100	7	RG-5125	\$0.30	\$0.21	\$0.18
0.12	120	7	RG-5130	\$0.30	\$0.21	\$0.18
0.15	150	7.5	RG-5135	\$0.30	\$0.21	\$0.18
0.18	180	7.5	RG-5140	\$0.30	\$0.21	\$0.18
0.22	220	7.5	RG-5145	\$0.30	\$0.21	\$0.18
0.27	270	7.5	RG-5150	\$0.42	\$0.29	\$0.25
0.33	330	8	RG-5153	\$0.42	\$0.29	\$0.25

100VDC LARGE VALUES Suitable for speaker crossovers, etc.

Value (μ F)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.47	470	11	RG-5165	\$0.40	\$0.28	\$0.24
0.56	560	15	RG-5166	\$0.60	\$0.42	\$0.36
0.68	680	11	RG-5168	\$1.75	\$1.20	\$1.05
0.82	820	15	RG-5169	\$1.75	\$1.20	\$1.05
1.00	1000	11	RG-5170	\$2.25	\$1.55	\$1.35
1.50	1500	20	RG-5172	\$3.45	\$2.35	\$2.00
2.20	2200	11	RG-5175	\$3.45	\$2.35	\$2.00
3.30	3300	21	RG-5180	\$3.45	\$2.35	\$2.00

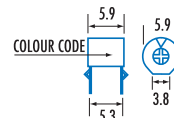
630VDC

Value (μ F)	(nF)	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.010	10	9	RG-5201	\$0.60	\$0.42	\$0.36
0.022	22	9	RG-5202	\$0.80	\$0.56	\$0.48
0.033	33	14	RG-5203	\$0.95	\$0.65	\$0.55
0.047	47	10	RG-5204	\$0.95	\$0.65	\$0.55
0.047	47	14	RG-5205	\$0.95	\$0.65	\$0.55
0.10	100	14	RG-5210	\$1.40	\$0.95	\$0.80
0.22	220	14	RG-5222	\$1.40	\$0.95	\$0.80
0.47	470	26	RG-5247	\$1.95	\$1.35	\$1.15

TRIMMERS



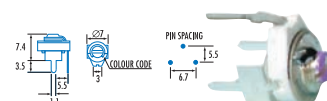
Specifications	All
Working Voltage	50V DC
Insulation Resistance	> 104M Ω min @ 250VDC
Operating Temp	-30°C to +85
Withstand Voltage	110VDC
Turning Torque	20 to 200gr/cm



Capacitance (pF)	Temp Coeff	Colour	Cat.	Qty 1+	Qty 25+	Qty 100+
3-10	N470	White	RV-5714	\$1.85	\$1.65	\$1.25
6.2-30	N750	Green	RV-5716	\$1.85	\$1.65	\$1.25
6.8-40	N1200	Yellow	RV-5718	\$1.85	\$1.65	\$1.25
9.8-50	N1200	Brown	RV-5720	\$1.85	\$1.65	\$1.25

8.5-100PF CERAMIC TRIMMER

Specifications	RV-5722
Working voltage	225VDC.
Insulation resistance	> 104M Ω min at 250VDC.
Withstand voltage	500VDC.
Temperature coefficient	N2200.
Colour	Purple



Capacitance (pF)	Voltage	Cat.	Qty 1+	Qty 25+	Qty 100+
8.5-100	225VDC	RV-5722	\$2.95	\$2.00	\$1.75

CAPACITORS - TAG TANTALUM

TAG TANTALUM THRU-HOLE

- Resin dipped case
- Price per each
- 5mm lead spacing

16V



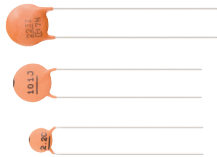
Value(μF)	Pitch (mm)	Cat.	Qty 1 +	Qty 25 +	Qty 100 +
4.7	5.0	RZ-6636	\$0.75	\$0.53	\$0.45
6.8	5.0	RZ-6642	\$1.15	\$0.80	\$0.65
10	5.0	RZ-6648	\$1.15	\$0.80	\$0.65
15	5.0	RZ-6657	\$1.15	\$0.80	\$0.65
22	5.0	RZ-6658	\$1.15	\$0.80	\$0.65
33	5.0	RZ-6665	\$2.65	\$1.85	\$1.55
47	5.0	RZ-6670	\$2.65	\$1.85	\$1.55

CAPACITORS (CONTINUED)

50V CERAMIC

1pF - 10pF ± 1/4pF
 12pF - 100pF ± 5%
 120pF - 0.022μF ± 10% (Y5P)
 0.033μF - 0.1μF ± 20% (Y5U)

- 5mm lead spacing
- Low inductance



Value (pF)	Cat.	Value	Cat.
1.0	RC-5300	120pF	RC-5325
1.2	RC-5301	150pF	RC-5326
1.5	RC-5302	180pF	RC-5327
1.8	RC-5303	220pF	RC-5328
2.2	RC-5304	270pF	RC-5329
2.7	RC-5305	330pF	RC-5330
3.3	RC-5306	390pF	RC-5331
3.9	RC-5307	470pF	RC-5332
4.7	RC-5308	560pF	RC-5333
5.6	RC-5309	680pF	RC-5334
6.8	RC-5310	820pF	RC-5335
8.2	RC-5311	1000pF	RC-5336
10	RC-5312	2200pF	RC-5340
12	RC-5313	3300pF	RC-5342
15	RC-5314	4700pF	RC-5344
18	RC-5315	5600pF	RC-5345
22	RC-5316	6800pF	RC-5346
27	RC-5317	8200pF	RC-5347
33	RC-5318	0.01μF	RC-5348
39	RC-5319	0.022μF	RC-5352
47	RC-5320	0.033μF	RC-5354
56	RC-5321	0.047μF	RC-5356
68	RC-5322	0.1μF	RC-5360
82	RC-5323		
100	RC-5324		

Pkt 2	Qty 1 +	Qty 25 +	Qty 100 +
All RC Cat Nos (Pkt 2)	\$0.32	\$0.22	\$0.19

0.22 μF 220N Lead spacing 5mm

↑	Cat.	Qty 1 +	Qty 25 +	Qty 100 +
(Each)	RC-5364	\$0.68	\$0.48	\$0.41

25V

Value(μF)	Pitch (mm)	Cat.	Qty 1 +	Qty 25 +	Qty 100 +
1.0	5.0	RZ-6627	\$0.75	\$0.53	\$0.45
10	5.0	RZ-6650	\$1.15	\$0.80	\$0.65

35V

Value(μF)	Pitch (mm)	Cat.	Qty 1 +	Qty 25 +	Qty 100 +
0.10	5.0	RZ-6620	\$0.75	\$0.53	\$0.45
0.22	5.0	RZ-6622	\$0.75	\$0.53	\$0.45
0.33	5.0	RZ-6624	\$0.75	\$0.53	\$0.45
0.47	5.0	RZ-6626	\$0.75	\$0.53	\$0.45
1.0	5.0	RZ-6628	\$0.75	\$0.53	\$0.45
1.5	5.0	RZ-6630	\$0.75	\$0.53	\$0.45
2.2	5.0	RZ-6632	\$0.75	\$0.53	\$0.45
4.7	5.0	RZ-6640	\$0.95	\$0.65	\$0.55
6.8	5.0	RZ-6645	\$1.15	\$0.80	\$0.65
10	5.0	RZ-6655	\$1.15	\$0.80	\$0.65

50VDC MONOLITHIC

Lead spacing 5mm, low impedance



↑	Value (μF)	Pkt	Cat.	Qty 1 +	Qty 25 +	Qty 100 +
	0.01	each	RC-5480	\$0.35	\$0.25	\$0.21
	0.022	each	RC-5482	\$0.35	\$0.25	\$0.21
	0.047	each	RC-5486	\$0.35	\$0.25	\$0.21
	0.10	each	RC-5490	\$0.35	\$0.25	\$0.21
	0.10	100	RC-5496	\$9.95	\$6.75	\$5.75
	0.22	each	RC-5494	\$0.38	\$0.27	\$0.23
	0.47	each	RC-5498	\$0.75	\$0.53	\$0.45
	1.0	each	RC-5499	\$0.75	\$0.53	\$0.45

50VDC BI-POLAR RB ELECTROLYTIC - 85°C



Value	Size (mm)	Pitch (mm)	Ripple (mA)	Cat.	Qty 1 +	Qty 25 +	Qty 100 +
1.0μF	5 x 11	2.0	8	RY-6802	\$0.55	\$0.39	\$0.33
2.2μF	5 x 11	2.0	20	RY-6804	\$0.55	\$0.39	\$0.33
3.3μF	5 x 11	2.0	25	RY-6805	\$0.55	\$0.39	\$0.33
4.7μF	5 x 11	2.0	30	RY-6806	\$0.55	\$0.39	\$0.33
6.8μF	5 x 11	2.0	40	RY-6808	\$0.55	\$0.39	\$0.33
10μF	6.3 x 11	2.5	48	RY-6810	\$0.55	\$0.39	\$0.33
22μF	8 x 11	3.5	82	RY-6816	\$0.95	\$0.65	\$0.55
33μF	8 x 11	3.5	98	RY-6818	\$1.15	\$0.80	\$0.65
47μF	8 x 11	3.5	140	RY-6820	\$1.65	\$1.15	\$0.95
100μF	10 x 20	5.0	245	RY-6825	\$2.95	\$2.00	\$1.75

3KV HIGH VOLTAGE CERAMIC

Value 0.01μF.

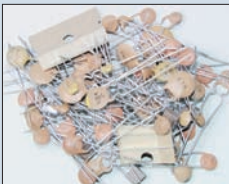


↑	Value(μF)	Cat.	Qty 1 +	Qty 25 +	Qty 100 +
	0.01	RC-5380	\$2.95	\$2.00	\$1.75

LET'S FIND EVERYTHING YOU NEED!

PROTOTYPE PACKS - CAPACITORS

- Ideal for prototyping

CAT. RC-5399
CERAMIC PACK OF 60CAT. RG-5199
100V GREENPACK PACK OF 60CAT. RM-7190
MKT PACK OF 50CAT. RE-6250
ELECTROLYTIC PACK OF 55

Value	Pack	Cat.	Qty 1 +	Qty 25 +	Qty 100 +
10pF - 100nF	60	RC-5399	\$9.95	\$6.75	\$5.75
0.001μF - 0.22μF	60	RG-5199	\$11.95	\$8.25	\$6.95
0.001μF - 0.47μF	50	RM-7190	\$14.50	\$9.75	\$8.25
1μF - 470μF	55	RE-6250	\$13.50	\$8.95	\$7.75

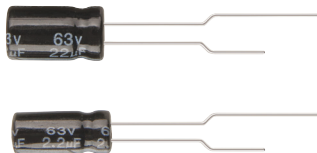
Want it fast? How about next day delivery? See page 4 for details.

Jaycar Electronics 2015

ELECTROLYTIC CAPACITORS

CAPACITORS (CONTINUED)

PC MOUNT RB ELECTROLYTIC - 105°C



10V

Value (μF)	Pitch (mm)	Ø x H (mm)	Ripple Current mA	Cat.	Qty 1+	Qty 25+	Qty 100+
220	5.0	6.5 x 11	180	RE-6157	\$0.35	\$0.25	\$0.21

16V

Value (μF)	Pitch (mm)	Ø x H (mm)	Ripple Current mA	Cat.	Qty 1+	Qty 25+	Qty 100+
10	2.0	5 x 11	45	RE-6066	\$0.30	\$0.21	\$0.18
22	2.0	5 x 11	60	RE-6079	\$0.30	\$0.21	\$0.18
47	2.0	5 x 11	100	RE-6100	\$0.35	\$0.25	\$0.21
100	2.5	6.3 x 11	170	RE-6130	\$0.35	\$0.25	\$0.21
220	3.5	8 x 12	280	RE-6158	\$0.40	\$0.28	\$0.24
330	3.5	8 x 12	360	RE-6188	\$0.50	\$0.35	\$0.30
470	3.5	8 x 16	460	RE-6194	\$0.60	\$0.42	\$0.36
1000	5.0	10 x 16	760	RE-6220	\$0.95	\$0.65	\$0.55
2200	5.0	13 x 23	1250	RE-6238	\$1.15	\$0.80	\$0.65
4700	7.5	16 x 26	1960	RE-6243	\$2.25	\$1.55	\$1.35

25V

Value (μF)	Pitch (mm)	Ø x H (mm)	Ripple Current mA	Cat.	Qty 1+	Qty 25+	Qty 100+
10	2.0	5 x 11	45	RE-6070	\$0.35	\$0.25	\$0.21
22	2.0	5 x 11	70	RE-6090	\$0.35	\$0.25	\$0.21
33	2.0	5 x 11	95	RE-6095	\$0.35	\$0.25	\$0.21
47	2.5	5 x 11	120	RE-6110	\$0.35	\$0.25	\$0.21
100	2.5	6.3 x 11	180	RE-6140	\$0.45	\$0.32	\$0.27
220	3.5	8 x 12	320	RE-6160	\$0.45	\$0.32	\$0.27
330	5.0	10 x 13	420	RE-6190	\$0.70	\$0.49	\$0.42
470	5.0	10 x 16	540	RE-6195	\$0.75	\$0.53	\$0.45
1000	5.0	13 x 20	900	RE-6230	\$1.15	\$0.80	\$0.65
2200	5.0	13 x 26	1460	RE-6240	\$1.50	\$1.05	\$0.90
4700	7.5	16 x 35	2150	RE-6244	\$3.45	\$2.35	\$2.00

50V

Value (μF)	Pitch (mm)	Ø x H (mm)	Ripple Current mA	Cat.	Qty 1+	Qty 25+	Qty 100+
4μ7	2.0	5 x 11	35	RE-6058	\$0.35	\$0.25	\$0.21
220	5.0	10 x 17	430	RE-6180	\$1.20	\$0.80	\$0.70
2200	7.5	16 x 35	1900	RE-6241	\$3.25	\$2.25	\$1.90
4700	10	22 x 40	2280	RE-6245	\$5.75	\$3.95	\$3.40

63V

Value (μF)	Pitch (mm)	Ø x H (mm)	Ripple Current (mA)	Cat.	Qty 1+	Qty 25+	Qty 100+
μ47	2.0	5 x 11	8	RE-6020	\$0.30	\$0.21	\$0.18
1μ	2.0	5 x 11	15	RE-6032	\$0.30	\$0.21	\$0.18
2μ2	2.0	5 x 11	22	RE-6042	\$0.30	\$0.21	\$0.18
3μ3	2.0	5 x 11	30	RE-6045	\$0.30	\$0.21	\$0.18
4μ7	2.0	5 x 11	40	RE-6060	\$0.35	\$0.25	\$0.21
10	2.0	5 x 11	65	RE-6075	\$0.35	\$0.25	\$0.21
22	2.5	6.3 x 11.5	100	RE-6080	\$0.35	\$0.25	\$0.21
47	3.5	8 x 12	180	RE-6122	\$0.45	\$0.32	\$0.27
100	5.0	8 x 16	280	RE-6150	\$0.95	\$0.65	\$0.55
470	5.0	13 x 25	880	RE-6210	\$1.65	\$1.15	\$0.95
1000	7.5	16 x 30	1400	RE-6236	\$2.45	\$1.70	\$1.45

TECH TALK!

105°C ELECTROLYTIC CAPACITORS

Our range of RB PC mount electrolytics up to 63 Volt are 105°C rated. This makes for more reliable service. Consider this when making price comparisons with competitors' 85°C products.

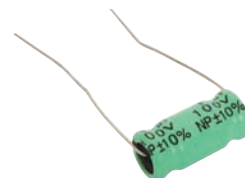
PC MOUNT RB ELECTROLYTIC - 85°C

35V

Value (μF)	Pitch (mm)	Ø x H (mm)	Ripple Current mA	Cat.	Qty 1+	Qty 25+	Qty 100+
22	5.0	5 x 11	80	RE-6092	\$0.35	\$0.25	\$0.21

100VDC NON-POLARISED CROSSOVER TYPE - 85°C

This range is ideal for crossover networks and will handle high power but are suitable for other applications of course. The range includes large values - up to 400μF, (required for subwoofers). All capacitors have RT or axial leads.



Value μF	Ø x L (mm)	Cat.	Qty 1+	Qty 5+	Qty 10+
1	8 x 17	RY-6901	\$2.10	\$1.85	\$1.65
2.2	8 x 17	RY-6902	\$2.10	\$1.85	\$1.65
3.3	8 x 19	RY-6903	\$2.20	\$1.95	\$1.75
4.7	8 x 19	RY-6904	\$2.20	\$1.95	\$1.75
6.8	10 x 19	RY-6906	\$2.50	\$2.21	\$2.05
10	10 x 19	RY-6908	\$2.50	\$2.21	\$2.05
15	10 x 19	RY-6910	\$2.65	\$2.35	\$2.07
22	10 x 24	RY-6912	\$3.10	\$2.75	\$2.45
33	13 x 27	RY-6914	\$3.65	\$3.25	\$2.90
47	13 x 32	RY-6916	\$4.85	\$4.30	\$3.85
68	16 x 34	RY-6918	\$5.50	\$4.90	\$4.30
100	16 x 34	RY-6920	\$7.45	\$6.65	\$5.90
150	18 x 38	RY-6924	\$11.95	\$10.70	\$9.50
220	18 x 44	RY-6928	\$13.95	\$12.35	\$10.95
300	22 x 44	RY-6932	\$18.95	\$16.95	\$14.95
400	22 x 44	RY-6936	\$21.95	\$19.70	\$17.35

2.5V SUPER CAPACITORS - 22 & 55 FARAD

These specially engineered capacitors are actually a high-tech energy storage device - not the standard capacitors which they look identical to. Using a new combination manufacturing process where nano surface structured carbon is combined with organic electrolytes, this technique enables these capacitors to store 1,000 times the energy of a standard electrolytic capacitor. The main applications are energy storage at a circuit board level replacing the bulkier secondary batteries which are currently used. Essentially anywhere high energy storage is needed.

- 7.5mm lead spacing
- High density of energy
- Long lifetime (10 years)
- High cycle life (over 500,000 cycles)



Value F	Ø x H (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
22	16 x 25	RE-6702	\$13.95	\$9.75	\$8.25
55	18 x 40	RE-6704	\$17.95	\$12.35	\$10.75

5.5V SUPER CAPACITOR - 0.047 FARAD & 1 FARAD

Super capacitors are a standby power source capable of providing up to 30 days back-up voltage & current to CMOS RAMs during power failures. Never needs replacing or maintenance

- Can be soldered onto PCBs
- Can be charged at high & low current rates i.e. microamps to amps
- 5mm lead spacing



Value F	Ø x H (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0.047	13 x 7.5	RU-6700	\$3.95	\$2.75	\$2.30
1.0	20 x 7.5	RU-6705	\$5.95	\$4.15	\$3.45

MOTOR START CAPACITORS

We have sourced a range of motor start capacitors necessary for starting single phase induction motors. These are suitable for motors operating at up to 400VAC and common values are offered here.

Please note it is important to choose the correct value for the motor otherwise the starting torque of the motor will change.

Two different packages are provided. For the higher valued capacitors it's necessary to use the different case style which provides the important AMP250A terminals and an inbuilt safety device.

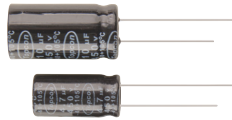


Capacitance (μF)	W x D x H (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
6.0	49 x 21 x 31	RU-6600	\$16.95	\$11.70	\$9.95
10	50 x 25 x 36	RU-6602	\$16.95	\$11.70	\$9.95
12	50 x 30 x 40	RU-6604	\$16.95	\$11.70	\$9.95
20	45 x 75	RU-6606	\$16.95	\$11.70	\$9.95
30	50 x 75	RU-6608	\$16.95	\$11.70	\$9.95

CAPACITORS (CONTINUED)

HIGH VOLTAGE RB ELECTROLYTIC

- 85°C rated



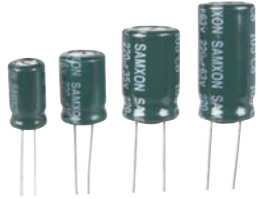
450V

* RE-6156 is 400V rated.

Value (µF)	Pitch (mm)	Ø x H (mm)	Ripple Current (mA)	Cat.	Qty 1+	Qty 25+	Qty 100+
1	3.5	10 x 14.5	12	RE-6034	\$1.75	\$1.20	\$1.05
2µ2	5.0	10 x 17	28	RE-6044	\$1.75	\$1.20	\$1.05
4µ7	5.0	10 x 20.5	48	RE-6062	\$2.50	\$1.75	\$1.50
10	5.0	13 x 21.5	75	RE-6078	\$3.50	\$2.45	\$2.05
47	8.0	17.5 x 36	285	RE-6125	\$7.50	\$5.25	\$4.45
100	13	18 x 42.5	521	RE-6156*	\$7.95	\$5.50	\$4.75

LOW IMPEDANCE* OR ESR† CAPACITORS

Stable, low impedance characteristics
High ripple current**
Low DC leakage current
Extended life - high reliability withstanding
2,000 to 4,000 hours load life at 105°C
Radial leads on standard pitch



*Impedance: max at 20°C 100kHz

**Ripple current measured at 105°C 100kHz.

†Equivalent Series Resistance

10VDC

Value (µF)	Ø x H (mm)	Impedance Ω*	Ripple Current (mA) RMS	Cat.	Qty 1+	Qty 25+	Qty 100+
220	6.3 x 12	0.22	340	RE-6300	\$0.42	\$0.29	\$0.25
470	8 x 11	0.13	640	RE-6302	\$0.50	\$0.35	\$0.30
1000	10 x 16	0.06	1210	RE-6304	\$0.85	\$0.60	\$0.51
2200	10 x 16	0.05	1900	RE-6306	\$1.25	\$0.85	\$0.75
4700	13 x 24	0.028	2552	RE-6308	\$2.25	\$1.55	\$1.35

16VDC

Value (µF)	Ø x H (mm)	Impedance Ω*	Ripple Current (mA) RMS	Cat.	Qty 1+	Qty 25+	Qty 100+
100	6.3 x 11	0.22	340	RE-6310	\$0.42	\$0.29	\$0.25
220	8 x 11	0.13	640	RE-6312	\$0.46	\$0.32	\$0.28
470	8 x 16	0.087	840	RE-6314	\$0.85	\$0.60	\$0.51
1000	10 x 20	0.046	1400	RE-6316	\$1.25	\$0.85	\$0.75
2200	16 x 25	0.035	2210	RE-6318	\$1.65	\$1.15	\$0.95
4700	16 x 32	0.022	3029	RE-6320	\$2.95	\$2.00	\$1.75

25VDC

Value (µF)	Ø x H (mm)	Impedance Ω*	Ripple Current (mA) RMS	Cat.	Qty 1+	Qty 25+	Qty 100+
100	8 x 11	0.22	340	RE-6322	\$0.50	\$0.35	\$0.30
220	8 x 12	0.13	640	RE-6324	\$0.50	\$0.35	\$0.30
470	10 x 16	0.060	1210	RE-6326	\$0.95	\$0.65	\$0.55
1000	13 x 20	0.035	1900	RE-6328	\$1.50	\$1.05	\$0.90
2200	16 x 25	0.022	2743	RE-6330	\$1.85	\$1.25	\$1.10

35VDC

Value (µF)	Ø x H (mm)	Impedance Ω*	Ripple Current (mA) RMS	Cat.	Qty 1+	Qty 25+	Qty 100+
47	6.3 x 11	0.22	340	RE-6332	\$0.42	\$0.29	\$0.25
100	8 x 11	0.13	640	RE-6334	\$0.50	\$0.35	\$0.30
220	10 x 16	0.09	840	RE-6336	\$0.80	\$0.56	\$0.48
470	10 x 20	0.046	1400	RE-6338	\$1.40	\$0.95	\$0.80
1000	16 x 25	0.035	2552	RE-6340	\$1.95	\$1.35	\$1.15

63VDC

Value (µF)	Ø x H (mm)	Impedance Ω*	Ripple Current (mA) RMS	Cat.	Qty 1+	Qty 25+	Qty 100+
22	6.3 x 11	0.70	180	RE-6342	\$0.42	\$0.29	\$0.25
47	8 x 11.5	0.30	295	RE-6344	\$0.50	\$0.35	\$0.30
100	10 x 20	0.12	760	RE-6346	\$0.95	\$0.65	\$0.55
220	10 x 20	0.060	1220	RE-6348	\$1.25	\$0.85	\$0.75
470	16 x 20	0.043	1690	RE-6350	\$1.75	\$1.20	\$1.05

TECH TALK!

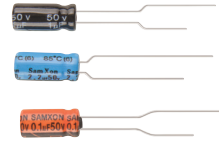
LOW ESR CAPACITORS

ESR means Equivalent Series Resistance.

Ordinary electrolytics are constructed in such a way that they can be quite "leaky", i.e. will conduct a small amount of DC current. They also have a fairly high impedance. This is not a problem if they are just used to filter 50 or 100Hz pulsating DC in a linear power supply. It is a problem if there is a high repetition pulse on, say, a switchmode DC supply line that needs to be filtered. A pulse train of, say, 50kHz will be virtually "ignored" by a standard electrolytic. A low ESR device has the ability to integrate the pulses into a smooth DC rail, and as a bonus not heat up in the process.

RBLL LOW LEAKAGE ELECTROLYTIC

- 85°C rated
- Leakage characteristic similar to tantalum caps, but at a lower price



25V

Value (µF)	Lead (mm)	Size (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
22	2.5	6.3 x 11	RL-6430	\$0.65	\$0.46	\$0.39
33	2.5	6.3 x 11	RL-6432	\$0.65	\$0.46	\$0.39
47	3.5	8 x 12	RL-6434	\$0.95	\$0.65	\$0.55
100	3.5	8 x 12	RL-6436	\$1.10	\$0.75	\$0.65

50V

Value (µF)	Lead (mm)	Size (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
0µ1	2.0	5 x 11	RL-6402	\$0.48	\$0.34	\$0.29
0µ22	2.0	5 x 11	RL-6406	\$0.48	\$0.34	\$0.29
0µ33	2.0	5 x 11	RL-6408	\$0.48	\$0.34	\$0.29
0µ47	2.0	5 x 11	RL-6410	\$0.48	\$0.34	\$0.29
0µ68	2.0	5 x 11	RL-6412	\$0.48	\$0.34	\$0.29
1µ0	2.0	5 x 11	RL-6414	\$0.48	\$0.34	\$0.29
1µ5	2.0	5 x 11	RL-6418	\$0.48	\$0.34	\$0.29
2µ2	2.0	5 x 11	RL-6420	\$0.48	\$0.34	\$0.29
3µ3	2.0	5 x 11	RL-6422	\$0.48	\$0.34	\$0.29
4µ7	2.0	5 x 11	RL-6424	\$0.48	\$0.34	\$0.29
10	2.5	6.3 x 11	RL-6428	\$0.67	\$0.47	\$0.40

RP ELECTROLYTIC

This style of capacitor is distinguished because, whilst bulky, does not need a chassis clamp. Fixing is by the stout lead wires. While soldered retention is generally adequate. For applications where vibration is an issue a dab of silicone under the component is recommended.

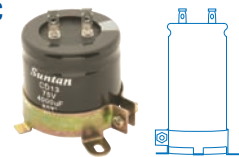
- 85°C rated

40V

Value (µF)	Ripple Current(A)	Size (mm)	Rated	Cat.	Qty 1+	Qty 25+	Qty 100+
5600	2.4	26 x 42	85°C	RU-6709	\$8.95	\$6.25	\$5.25
10000	2.7	26 x 51	85°C	RU-6720	\$11.95	\$8.25	\$6.95

RG CHASSIS MOUNT ELECTROLYTIC

- 85°C rated



Value (µF)	Voltage (V)	Ripple Current(A)	Size (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
4000	75	4.6	35 x 51	RU-6708	\$11.95	\$8.25	\$6.95
8000	80	3.47	35 x 76	RU-6710	\$14.95	\$10.35	\$8.75
10000	100	8.1	50 x 80	RU-6712	\$28.95	\$19.95	\$14.95

All supplied with mounting bracket. Height and diameter column excludes lugs - 8mm.

TECH TALK!

LOW ESR CAPACITORS

These offer low cost and high capacitance in a small physical size. Normally there are two types, the 'High Stability Temperature Compensating' type and the 'Bypass and Coupling' type. The former for use in resonant circuit and filter applications, with a value largely independent of voltage and frequency. The latter is for use in less critical applications, as they are less stable and have non-linear temperature characteristics and are somewhat voltage dependent.

POLYESTER: These type offer good stability, a large range of values at low cost, and are the most widely used capacitor for general purpose.

POLYCARBONATE: These have a low temperature coefficient, low dielectric loss at high frequency and excellent temperature stability characteristics.

POLYSTYRENE: These offer tight tolerance and are highly stable; making them suitable for very stable tuned circuits and oscillators.

POLYPROPYLENE: This type has a very low dielectric loss and are particularly suitable in audio circuits and sample-and-hold circuits.

MYLAR: This is the Du Pont tradename for polyester. They usually have an aluminium film deposit on the dielectric and are called "metallised polyester".

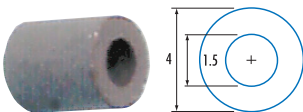
CAPACITOR QUICK REFERENCE CHART

Use	Cap.	Cat.	Page
RF	Ceramic	RC-5XXX	87
AUDIO	MKT	RM-7XXX	86
SMPS	Low ESR	RE-63XX	89
PSU	Electrolytic	RE-60XX	88
CROSSOVER	Poly/Electrolytic	RY-69XX	88
MOTOR	Motor Start	RU-66XX	88

FERRITES

FERRITE BEAD

These small tubes can be threaded on to a wire to provide RF or interference suppression at frequencies higher than the normal operating range of the equipment to be protected.

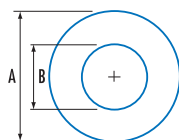


Length (mm)	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
5.0	6	LF-1250	\$3.95	\$2.75	\$2.30

FERRITE SUPPRESSION SLEEVES

Similar to suppression beads (see above) but longer for greater attenuation.

Cat.	Typical Impedance (Z)@25MHz	(Z)@100MHz
LF-1256	52	66
LF-1258	130	200
LF-1260	161	255

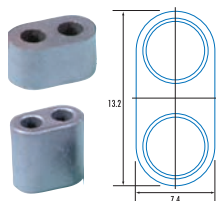


Length (mm)	A (mm)	B (mm)	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
16	8.0	5.6	6	LF-1256	\$4.95	\$3.45	\$2.90
20	12	5.6	6	LF-1258	\$6.50	\$4.45	\$3.75
29	16	8.0	6	LF-1260	\$7.50	\$5.25	\$4.45

STANDARD TRANSFORMER (BALUN) CORES

Generally used in VHF/UHF circuits for balanced or unbalanced line matching. Can also be used as a lossy choke, etc.

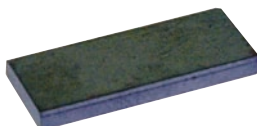
- Material: Type M7
- Insertion Loss: 40-220MHz 0.5dB
- > 220MHz 1.0dB



Length (mm)	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
6.0	2	LF-1222	\$2.50	\$1.75	\$1.50
14	2	LF-1220	\$2.50	\$1.75	\$1.50

FERRITE FLAT BAR

- Short and compact.
- Ideal for MW tuned circuits
- Frequency: 0.5 - 10MHz
- Also suitable for suppression work



L x W x D (mm)	Cat	Qty 1+	Qty 25+	Qty 100+
40 x 12 x 5	LF-1016	\$2.50	\$1.75	\$1.50

FERRITE ROUNDS

- 9mm diameter.
- Ideal for MW tuned circuits or suppression work



Ø x W (mm)	Cat	Qty 1+	Qty 25+	Qty 100+
9 x 100	LF-1010	\$2.50	\$1.75	\$1.50
9 x 180	LF-1012	\$5.25	\$3.60	\$3.15

FERRITE ROD WITH COIL

Small ferrite rod complete with pre-wound standard broadcast band coil. Ideally suitable to our 60-160pf mini tuning capacitor



L x W x D (mm)	Cat	Qty 1+	Qty 25+	Qty 100+
55 x 12.5 x 4.5	LF-1020	\$3.50	\$2.45	\$2.05

HIGH FREQUENCY FERRITE CHOKE

PCB mounting ferrite chokes suitable for frequency circuits.



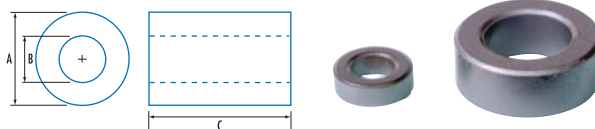
Inductance	Pitch (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
47µH	5.0	LF-1100	\$0.85	\$0.60	\$0.51
100µH	5.0	LF-1102	\$0.85	\$0.60	\$0.51
220µH	5.0	LF-1104	\$0.85	\$0.60	\$0.51
330µH	5.0	LF-1106	\$0.85	\$0.60	\$0.51
470µH	5.0	LF-1108	\$0.85	\$0.60	\$0.51

TOROID (OR RING) CORES

Toroid (both ferrite and powdered iron) are commonly used as cores for transformers or chokes mainly for RF suppression but also for any application where a compact reactive component is needed.

Drawing for both ferrite and powdered iron types
See website for more info.

FERRITE MATERIAL



MATERIAL L8 SIZE 18(A) X 10(B) X 6(C) (mm)

Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
6	LO-1230	\$3.50	\$2.45	\$2.05

MATERIAL L8 SIZE 25(A) X 15(B) X 10(C) (mm)

Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
4	LO-1234	\$4.95	\$3.45	\$2.90

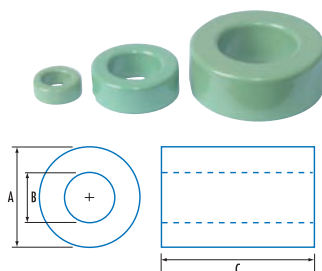
MATERIAL L15 SIZE 35(A) X 21(B) X 13(C) (mm)

Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
2	LO-1238	\$4.95	\$3.45	\$2.90

POWDERED IRON CORES

These toroids are made out of compressed powdered iron and coated with a tough epoxy material. They are ideal for RF suppression of light dimmers, motor speed controllers, switch mode power supplies etc.

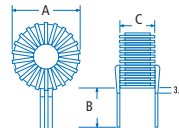
- Colour: Green epoxy coating.
- Contact us for bulk quantity prices
- Material HY-2



A x B x C (mm)	Pkt	Cat	Qty 1+	Qty 25+	Qty 100+
15 x 8 x 6.5	4	LO-1242	\$6.50	\$4.45	\$3.75
28 x 14 x 11	2	LO-1244	\$5.50	\$3.75	\$3.25
42 x 22 x 17	1	LO-1246	\$8.95	\$6.25	\$5.25

THROUGH HOLE EMC/RFI SUPPRESSION CHOKES

Ideal for all wideband choke applications. Highly effective against EMI/RFI entering equipment via the mains power lines. Powdered iron core.



Specifications	LF-1270	LF-1272	LF-1274	LF-1276	LF-1278
RDC mΩ	50	25	25	60	82
Wire Dia mm	1.0	0.8	1.0	1.0	1.0
Dimension A mm	26	21	24.5	28.5	31
Dimension B mm	25	10	10	10	10
Dimension C mm	13	10.5	10	13	17



Inductance (µH)	Current (A)	Cat	Qty 1+	Qty 25+	Qty 100+
100	3A	LF-1272	\$3.95	\$2.75	\$2.30
100	5A	LF-1270	\$3.95	\$2.75	\$2.30
47	5A	LF-1274	\$3.95	\$2.75	\$2.30
220	5A	LF-1276	\$5.95	\$4.15	\$3.45
470	5A	LF-1278	\$6.95	\$4.75	\$4.15

SMD TYPE EMC/RFI SUPPRESSION CHOKES

These popular devices complement our wire - terminated LF-1270 style ferrite chokes. Good suppression of RF-EMI from DC/DC converters or any circuit which generates commutation noise etc. which needs to be suppressed to meet regulations. Supplied in bags of 10 cut from a tape reel.



Specifications	LF-1400	LF-1402
Inductance	100uH +/-10%	100uH +/-20%
Series DC resistance (RDC)	0.99Ω	179.6mΩ max
Rated DC current	520mA	1.8A
Size	5.8 x 4.5mm	12 x 12 x 8mm

Pkt	Cat.	Qty 1+	Qty 25+	Qty 100+
10	LF-1400	\$7.95	\$5.50	\$4.75
10	LF-1402	\$12.95	\$8.95	\$7.75

FERRITES (CONTINUED)

FLAT CABLE SUPPRESSION SLEEVES

These devices are designed to suppress high frequency (fast rise time) interference (radiation) to and from PC boards, printers, disk drives etc. The ferrite makes the cable behave like a high impedance choke at high frequencies.



FOR 16 WAY RIBBON CABLE

↑ Typical Impedance	25MHz	100MHz	Cat	Qty 1+	Qty 25+	Qty 100+
Pkt 2	54Ω	120Ω	LF-1280	\$5.95	\$4.15	\$3.45

FOR 26 WAY RIBBON CABLE

↑ Typical Impedance	25MHz	100MHz	Cat	Qty 1+	Qty 25+	Qty 100+
Each	38Ω	91Ω	LF-1284	\$6.95	\$4.75	\$4.15

FOR 50 WAY RIBBON CABLE

(Supplied as a split pair with 2 end clips)

↑ Typical Impedance	25MHz	100MHz	Cat	Qty 1+	Qty 25+	Qty 100+
Each	72Ω	190Ω	LF-1286	\$12.95	\$8.95	\$7.75

TECH TALK!

WHAT, EXACTLY IS FERRITE?

Ferrite is a ceramic material with Iron Oxide - up to 50% - then with oxides of manganese and zinc or nickel.

The ceramic material is mixed with these substances, pressed or extruded into useful shapes and finally fired in a furnace to their final hard, brittle state. From this there are two forms: Manganese - Zinc (Mn-Zn) ferrites which are the most common and are used for lower frequency work. They have higher permeability than the higher frequency type which have Nickel and Zinc Oxide components.

The products shown in this catalogue are Mn-Zn types. For more information check our website.

ROUND CABLE SUPPRESSION SLEEVES



Basically a split high permeability ferrite core with a plastic case, these devices are ideal where parasitic voltage spikes or RF breakthrough are a problem or potential problem. The cores come in a hinged plastic case, simply snap on to the computer or data cable. Three versions are offered which cover most computer leads etc. For extra security, lock assembly together with a cable tie.

TYPICAL IMPEDANCE VS FREQUENCY

(Rise Time of Interference Signal) Note: All figures are approximate

Model	Cable Dia	1MHz	25MHz	50MHz	100MHz	300MHz	500MHz
U-25	12.5	10Ω	150Ω	200Ω	250Ω	290Ω	200Ω
U-16	8.2	20Ω	100Ω	200Ω	220Ω	150Ω	<100Ω
U-15	7.0	<10Ω	160Ω	220-250Ω	280Ω	300+Ω	245Ω

PLEASE NOTE:

- Full specifications available on website.
- If the cable can be looped through the core twice or more (obviously only for thinner cables) the attenuation is increased substantially.

MORE INFO
WEB

MODEL U25:

This offers impedance (peak approx 300Ω at 2-300MHz) with negligible impedance below 1MHz. Plastic case measures 32L x 30mm square. It will take a lead up to 12mm (1/2") diameter but preferably 10mm.

↑ Cat.	Qty 1+	Qty 25+	Qty 100+
Each LF-1290	\$9.95	\$6.75	\$5.75



MODEL U16:

A compact attenuator that will pass a cable up to 8mm dia (most monitor cables etc). Typical impedance at 25MHz 300Ω approx, 590Ω at 100MHz dropping off after that. Case measures 20Lx19Dia mm.

↑ Cat.	Qty 1+	Qty 25+	Qty 100+
Pkt 4 LF-1292	\$12.95	\$8.95	\$7.75



MODEL U15:

This model is for 7mm dia cable or smaller.

- Offers good protection up to 500MHz.

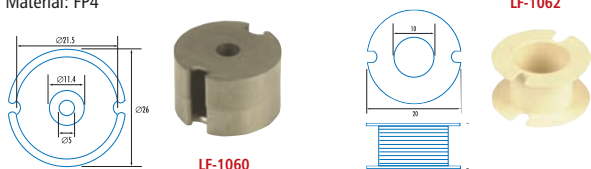
↑ Cat.	Qty 1+	Qty 25+	Qty 100+
Pkt 2 LF-1294	\$9.95	\$6.75	\$5.75



POT CORE & BOBBIN

This handy sized pot core set is made from low loss material and is equivalent to the original Philips FX 2240 part.

- Size (each half): 26(OD) x 11.5(ID) x 8(H)mm
- Material: FP4

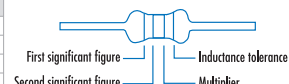


↑	Cat.	Qty 1+	Qty 25+	Qty 100+
Pot Core - pair	LF-1060	\$6.95	\$4.75	\$4.15
Bobbin to suit	LF-1062	\$1.35	\$0.90	\$0.80

RF CHOKES

Specifications

Axial leads	Colour coded per IEC
Tolerance	± 10%,
Rated temp. rise	-20°C to +80°C
Dielectric withstanding voltage	250Vrms



(μH) DC Inductance	(Ω) Rated Resistance	DC Current Max (mA)	Cat.	(μH) DC Inductance	(Ω) Rated Resistance	DC Current Max (mA)	Cat.
1μ0	0.09	920	LF-1510	47	1.22	340	LF-1530
1μ5	0.23	830	LF-1512	68	1.47	305	LF-1532
2μ2	0.28	750	LF-1514	100	1.80	275	LF-1534
3μ3	0.34	670	LF-1516	150	4.20	175	LF-1536
4μ7	0.39	620	LF-1518	220	5.10	155	LF-1538
6μ8	0.48	550	LF-1520	330	6.40	137	LF-1540
10	0.58	500	LF-1522	470	7.70	126	LF-1542
15	0.72	460	LF-1524	680	9.40	113	LF-1544
22	0.84	410	LF-1526	1000	14.00	100	LF-1546
33	1.03	370	LF-1528				

↑	Qty 1+	Qty 25+	Qty 100+
All the above	\$0.75	\$0.53	\$0.45

FERRITE RF COIL PACK

MINI COIL PACK

Set of 4 standard coils for AM section of a superheterodyne receiver with 455kHz. IF offset. Colour dot on top of ferrite slug indicates type.

- Red is the oscillator coil
- White is the first 455kHz IF
- White is the 2nd
- Black is the 3rd.
- See website for more information.

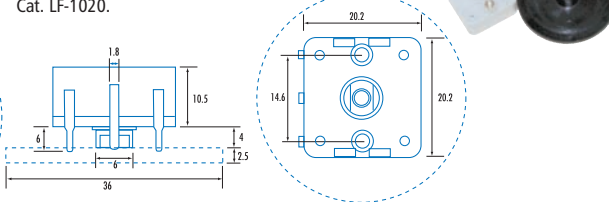


↑	Cat.	Qty 1+	Qty 25+	Qty 100+
	LF-1050	\$5.95	\$4.15	\$3.45

MINIATURE TUNING CAPACITOR

As used in most transistor radios and many kits that incorporate a radio.

- Size 20 x 20 x 10.5 high (mm).
- Supplied with 35(mm) dia. plastic knob & screw.
- Capacitance range 60 - 160pF
- Suitable Ferrite Aerial Coil Cat. LF-1020.



↑ Size (mm)	Cat.	Qty 1+	Qty 25+	Qty 100+
20 x 20 x 10.5	RV-5728	\$4.75	\$3.30	\$2.75

AUTOMATIC ACCOUNT

For Schools, Government Departments, Public Companies, Radio & TV Stations

EMI FILTERS

IEC EMI POWER LINE FILTER - 6 AMP

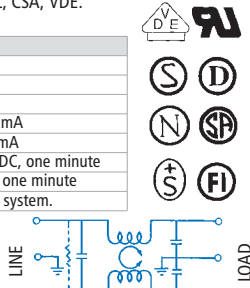
These Industry standard design RF/EMI filters are designed to reduce line - to - ground (common mode) interference. They accept a standard IEC power line connector and are panel mounted. They meet (or exceed) international standard leakage requirements and are rated for mains voltages of 115 to 250V, 50, 60Hz.

- Safety and construction are in compliance with UL, CSA, VDE.



Specifications:	MS-4003
Rated voltage	115/250VAC
Power line freq	50/60Hz
Rated current	6 amps
Maximum leakage current	@ 115 VAC 60Hz 0.25mA
Line to ground	@ 250VAC 50Hz 0.50mA
Test voltage	Line to ground: 2250VDC, one minute Line to line: 1450VDC, one minute
Typical insertion loss (dB) =	Line-to-ground in 50Ω system.

Current	Freq (MHz)					
Rating	0.15	0.5	1	5	10	30
6A	10	20	25	42	45	50



↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	MS-4003	\$9.95	\$8.75	\$7.75

240V AC EMI FILTER

Designed for mounting inside a chassis, these industry standard RF/EMI filters are pre-designed to reduce line-to-ground (common mode) interference. Rated for mains voltages of 125 or 240VAC 50 or 60Hz, they are very useful when mains cords are fixed to the outside chassis and an IEC320 inlet is not suitable.

POWERTECH



Specifications:	MS-4000/MS-4001
Rated voltage	250VAC, 50Hz
Rated current	10A
Leak current	0.8mA max
Insulation resis	100M ohm min
Attenuation	1 - 50MHz
Termination	PCB mounting pins (MS-4000) & solder tags (MS-4001)
Dimensions: MS-4000	36(L) x 31(W) x 19(H)mm
Dimensions: MS-4001	50(L) x 25(W) x 31(H)mm



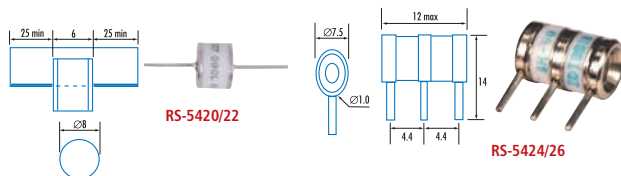
⬆	Cat.	Qty 1 +	Qty 25 +	Qty 100 +	
	PCB Mount - 4 Way	MS-4000	\$7.95	\$6.95	\$6.25
	Chassis Mount - 6 Way	MS-4001	\$9.95	\$6.75	\$5.75

SURGE ARRESTORS

GAS DISCHARGE TYPE SURGE ARRESTERS

Gas discharge arresters are ideal for quenching high voltage, fast rise-time interference transients. They are very high impedance (virtually open circuit) in the normal state with a typical capacitance of 1pF between electrodes. When a voltage spike appears, they arc over and present a relatively low impedance in this condition effectively quenching the spike. They are suitable for protection of telecom lines and antenna circuits. They are not recommended to be fitted across mains circuits as the low source impedance of the mains could destroy these devices after the fault spike has cleared.

- Well-proven and reliable device.
- Four models are offered.



DC Spark Over Voltage	Axial 2 Electrodes	PCB Mount 3 Electrodes
90V +/- 20%	Cat. RS-5420	Cat. RS-5424
230V +/- 15%	Cat. RS-5422	Cat. RS-5426

**MANUFACTURERS:
CONTACT US FOR
BULK PRICES.**

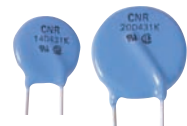
↑		Cat.	Qty 1 +	Qty 10 +	Qty 25 +
90V	2 Electrodes	RS-5420	\$9.95	\$8.75	\$7.75
230V	2 Electrodes	RS-5422	\$9.95	\$8.75	\$7.75
90V	3 Electrodes	RS-5424	\$9.95	\$8.75	\$7.75
230V	3 Electrodes	RS-5426	\$9.95	\$8.75	\$7.75

VOLTAGE PROTECTION

METAL OXIDE VARISTORS (MOV)

Ideal protection against voltage spikes or transients. Most mains filters have MOVs. Helps to prevent damage to sensitive equipment such as microprocessors and digital electronics.

- Resin dipped case



Prices per each.

Operating Voltage(AC)	Dia	Clamping Voltage(V)	Peak Current(A)	Max Energy(J)	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
10	8	143	100	0.4	RN-3411	\$1.75	\$1.55	\$1.40
10	13.5	18	500	2.8	RN-3412	\$1.75	\$1.55	\$1.40
10	17.5	143	1000	6.6	RN-3413	\$1.75	\$1.55	\$1.40
275	13.5	710	2500	60	RN-3406	\$1.75	\$1.55	\$1.40
275	17.5	710	4500	115	RN-3400	\$1.75	\$1.55	\$1.40
275	24	710	6500	190	RN-3404	\$1.75	\$1.55	\$1.40
460	13.5	750	2500	125	RN-3415	\$1.75	\$1.55	\$1.40
460	17.5	750	4500	203	RN-3416	\$1.75	\$1.55	\$1.40
460	24	1240	6500	266	RN-3417	\$1.75	\$1.55	\$1.40

TRANSIENT VOLTAGE SUPPRESSORS (TVS)

- Excellent clamping voltage
- Low Zener impedance
- Fast response time
- Operating & storage temperature -55°C to 175°C



400W RANGE (DC) • Peak power: 400W • Steady state: 1W

Standoff Voltage(V)	Vbr	Clamp Voltage	Peak Pulse Current(A)	Package Size	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
5.5	6.12	10.8	38	D0-41	ZR-1150	\$1.75	\$1.55	\$1.40
12.1	13.5	22.0	19	D0-41	ZR-1152	\$1.75	\$1.55	\$1.40
12.9	14.4	23.5	18	D0-41	ZR-1154	\$1.75	\$1.55	\$1.40

400W RANGE (AC) • Peak power: 400W • Steady state: 1W

Standoff Voltage(V)	Vbr	Clamp Voltage	Peak Pulse Current(A)	Package Size	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
12.8	14.3	21.2	20	D0-41	ZR-1160	\$1.85	\$1.65	\$1.45
13.6	15.2	22.5	19	D0-41	ZR-1162	\$1.85	\$1.65	\$1.45
342	380	548	0.7	D0-41	ZR-1164	\$3.95	\$3.45	\$3.15

1500W RANGE (DC) • Peak power: 1500W • Steady state: 5W

Standoff Voltage(V)	Vbr	Clamp Voltage	Peak Pulse Current(A)	Package Size	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
12.1	13.5	22	69.1	D0-201	ZR-1168	\$2.95	\$2.60	\$2.40
12.9	14.4	23.5	64.7	D0-201	ZR-1170	\$2.95	\$2.60	\$2.40

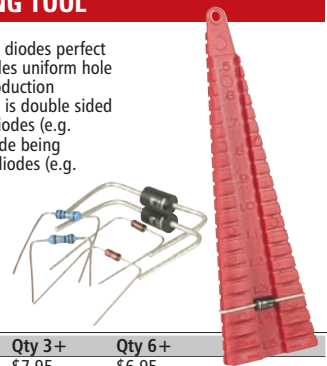
1500W RANGE (AC) • Peak power: 1500W • Steady state: 5W

Standoff Voltage(V)	Vbr	Clamp Voltage	Peak Pulse Current(A)	Package Size	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
13.6	15.2	22.5	67.6	D0-201	ZR-1175	\$3.95	\$3.45	\$3.15
30.8	34.2	49.9	30.5	D0-201	ZR-1177	\$4.95	\$4.45	\$3.90
342	380	548	2.8	D0-201	ZR-1180	\$4.95	\$4.45	\$3.90

COMPONENT LEAD FORMING TOOL

Get the hole spacing for your resistors and diodes perfect every time. This handy forming tool provides uniform hole spacing from 10 to 38mm. Suitable for production assembly, education and training. The tool is double sided with one side for use with DO47 outline diodes (e.g. 1N914) and 1W Zener diodes; the other side being suitable for 1/4W resistors, DO41 outline diodes (e.g. 1N4004).

- An incredibly handy tool!
- Made in USA from engineering plastic.
- Dimensions: 138 (L)mm



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	TH-1810	\$8.95	\$7.95	\$6.95

LET'S POINT YOU TO THE RIGHT PAGE...

Electromechanical & Enclosures

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ENCLOSURES

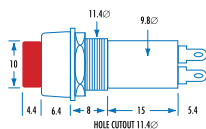
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PUSHBUTTON SWITCHES

SPST SQUARE

Rated 3A 250V AC.

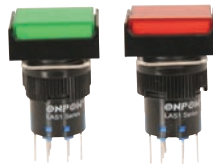
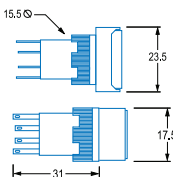
- Mounting hole 12mm



	Cat.	Qty 1+	Qty 10+	Qty 25+
Push-on Momentary SPST Red	SP-0716	\$1.95	\$1.75	\$1.55
Push-on/Push off SPST Black (Latching)	SP-0718	\$1.95	\$1.75	\$1.55
Push-Off (N/C) SPST Momentary - Red	SP-0717	\$1.95	\$1.75	\$1.55

DPDT ILLUMINATED - IP65

- Available in momentary or on/off action
- Rated for 250VAC 5A
- 12VDC LED illumination
- Mounting hole 15mm
- IP65 rated
- Contact arrangement DPDT N.O./N.C.

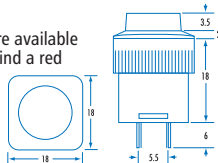


Rating	Colour	Action	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 5A	Green	Momentary	SP-0741	\$9.95	\$8.75	\$7.75
250VAC 5A	Green	Push On Push Off	SP-0745	\$12.95	\$11.35	\$10.35
250VAC 5A	Red	Momentary	SP-0747	\$9.95	\$8.75	\$7.75
250VAC 5A	Red	Push On Push Off	SP-0749	\$12.95	\$11.35	\$10.35

SPST LED ILLUMINATED

These short bodied pushbuttons are available in 2 styles. Both have red LEDs behind a red diffused actuator.

- Rated at 1.5A 250VAC.
- LED needs 2VDC @ 20mA.

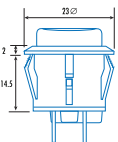


	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 1.5A Momentary	SP-0706	\$5.95	\$5.25	\$4.75
250VAC 1.5A Push On Push Off	SP-0704	\$5.95	\$5.25	\$4.75

ROUND - IP56

IP56 rated round 'pushbutton switches.

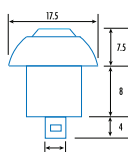
- QC spade lugs.
- Push on/push off
- Mounting hole: 20mm dia



	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
DPST 250VAC 6A	Black	SP-0743	\$5.95	\$5.25	\$4.75
DPST 250VAC 6A	Red Illuminated	SP-0751	\$6.95	\$6.25	\$5.50

SPST DOME - IP67

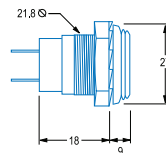
- IP67 rated
- Momentary action
- Mounting hole 12mm
- Contact arrangement SPST N.O.



	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
50V 100mA	Black	SP-0656	\$4.95	\$4.45	\$3.90
50V 100mA	Red	SP-0657	\$4.95	\$4.45	\$3.90

SPST ROUND - IP65

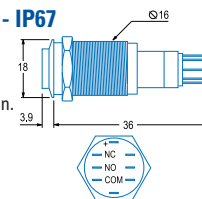
- Available in momentary or on/off action
- IP65 rated
- Rated for 14V 10A
- Mounting hole 22mm
- Contact arrangement SPST N.O.



	Cat.	Qty 1+	Qty 10+	Qty 25+
12V 10A Black Momentary	SP-0756	\$6.95	\$6.25	\$5.50
12V 10A Red Momentary Illuminated	SP-0757	\$8.95	\$7.95	\$6.95
12V 10A Black Push On Push Off	SP-0758	\$6.95	\$6.25	\$5.50
12V 10A Red Push On Push Off Illum	SP-0759	\$8.95	\$7.95	\$6.95

DPDT ILLUMINATED - IP67

- IP67 rated.
- Illuminated
- DPDT (N.O./N.C.), DPDT, on-off or momentary action.
- Rated for 250VAC@3A
- 12VDC LED illumination
- Mounting hole 16mm.

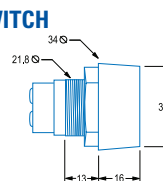


Rating	Colour	Action	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 3A	Red	on - off	SP-0791	\$15.95	\$14.35	\$12.70
250VAC 3A	Green	on - off	SP-0792	\$15.95	\$14.35	\$12.70
250VAC 3A	Blue	on - off	SP-0793	\$15.95	\$14.35	\$12.70
250VAC 3A	Red	Momentary	SP-0796	\$12.95	\$11.35	\$10.35
250VAC 3A	Green	Momentary	SP-0797	\$12.95	\$11.35	\$10.35

IGNITION SWITCHES

ENGINE START SWITCH

- Keyless engine start for track or street use
- Illuminated momentary action pushbutton
- Rated for 12VDC 50A
- Mounting hole 22mm
- Contact arrangement SPST N.O.

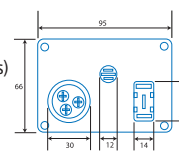


	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 50A	SP-0773	\$19.95	\$17.70	\$15.70

RACING IGNITION SWITCH PANEL

Complete ignition switch panel ready to install in your car. Push button engine start, missile launch ignition on and indicator light. Finished in faux carbon fibre to complete the look.

- Max depth 38mm
- Contact arrangement SPST N.O. (both switches)
- 95(W) x 66(H)mm



	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	SP-0774	\$34.95	\$31.45	\$27.90

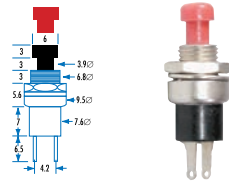
PUSHBUTTON SWITCHES

MOMENTARY SWITCHES

SPST - MINIATURE

125VAC 1 amp rating.
Momentary action.

- Push-on

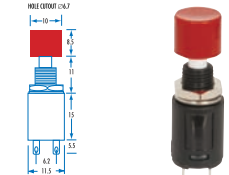


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC 1A Red	SP-0710	\$1.65	\$1.45	\$1.30
125VAC 1A Black	SP-0711	\$1.65	\$1.45	\$1.30

SPST

SPST momentary push on switch
Rated @ 1.5A 250VAC.
Actuator diameter 10mm.

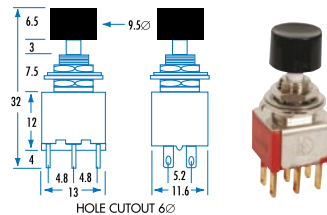
- Cutout 7mm.
- Will panel mount on 1/2" centres.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 1.5A	SP-0702	\$3.95	\$3.45	\$3.15

DPDT

- Rated 3A 125VAC
- 6mm mounting hole.
- Momentary Action DPDT
- Black Actuator.
- The quality of the switch can be felt when actuated.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC 3A	SP-0714	\$7.95	\$6.95	\$6.25

PUSH BUTTON SWITCH CAPS

Black caps which press fit over Push Button switches with a shaft diameter of 2.54mm (0.1inch). OD: 5mm, Height: 5mm

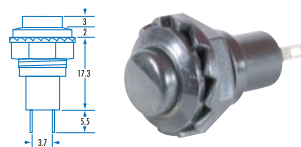


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 10	SP-0596	\$4.95	\$4.45	\$3.90

SPST PANEL MOUNT

Very attractive small round momentary push on switch, with black body and black actuator, rated @ 1.5A 250VAC.

- Contact Arrangement SPST N.O.
- Cutout is 12.5mm.
- Solid construction

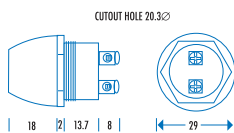


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 1.5A	SP-0700	\$3.95	\$3.45	\$3.15

LARGE WATERPROOF PUSHBUTTON SWITCH

Plastic housing with brass 5A DC contacts. Rubber cap over housing renders assembly virtually waterproof.

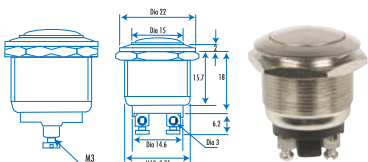
- Requires 22mm mounting hole
- Screw terminals.
- Ideal for horn button, starter motor activation, etc.
- Contact Arrangement SPST N.O.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 5A	SP-0732	\$4.95	\$4.45	\$3.90

METAL FINISH PUSHBUTTON

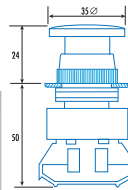
- Silver metal body
- Rated 8A @ 125VAC or 4A @ 250VAC
- Momentary action
- 19mm mounting hole
- Screw terminal termination
- Contact Arrangement SPST N.O.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC 8A	SP-0755	\$5.95	\$5.25	\$4.75

LATCHING EMERGENCY STOP SWITCH

Essential for installations of industrial or lab equipment. Latching actuator with rotating release and normally closed contacts. When the actuator is pushed in, the normally closed contacts open and the switch is latched, ensuring the equipment can't be operated until the switch is intentionally disengaged by rotating the actuator and releasing. It has two independent sets of contacts; normally open and normally closed.



Specifications	2 contact sets, normally closed (RED) & normally open (GREEN)
Configuration	Push off, rotate on
Actuation	125VAC 6A, 300VAC 3A
Contact rating	22mm
Mounting hole	

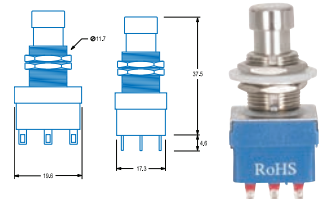
↑	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC 6A	SP-0786	\$9.95	\$8.75	\$7.75

FOOT SWITCHES

3PDT HEAVY DUTY FOOT SWITCH

Being 3 pole means you can wire your stompbox projects to be true bypass. It also has a low profile body so it can be accommodated in shallow enclosures and it has a solid, positive click on/off action. Heavy duty for the rough and tumble world of rock n' roll.

- Push on - push off
- 250VAC 2A rated.
- Hole size: 12mm

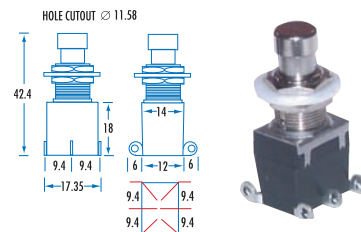


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 2A	SP-0766	\$11.95	\$10.70	\$9.50

DPDT HEAVY DUTY FOOT SWITCH

The alternative action switch (push on, push off).

- Contact rating with resistive load 2A@250VAC.
- Contact resistance <0.08Ω.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 2A	SP-0764	\$7.95	\$6.95	\$6.25

FOOT SWITCH

This foot switch is momentary action and can be wired to be either push-on or push-off. The switch is rated at 250V 10 amp. The switch has a positive switch feel and an audible "click" when pressed. Could be used in PA applications, dictaphones etc.

- Switch size 80(W) x 80(L) x 30(D)mm.
- Colour is grey, cable is 850mm long.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	SP-0760	\$24.95	\$22.35	\$19.70

BELL PUSHBUTTONS

ILLUMINATED BELL PUSHBUTTON

This door bell button has a small globe mounted behind which illuminates the pushbutton and an area where you can place your name or street number. Supplied with 12V globe, which also works on lower voltage.

- Contact Arrangement SPST N.O.
- Globe in parallel with contacts



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Pushbutton	SP-0782	\$7.95	\$6.95	\$6.25
Spare Globe	SL-2720	\$1.95	\$1.75	\$1.55

PUSHBUTTON SWITCHES

TACTILE SWITCHES

SPST MICRO

VERTICAL MOUNT



"A" - Actuator Height

Specifications	
Rating	12VDC 50mA
Operating Temp	-20~70°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ Min. at 100VDC
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	SPST N.O.
Action	Momentary

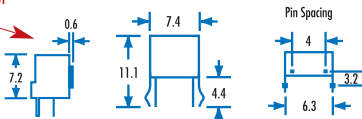
Pin Spacing



RIGHT-ANGLE VERSION



"A" - Actuator Height



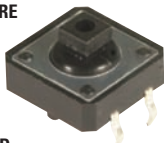
↑	Vertical Mount	Actuator	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC 50mA	0.7mm	SP-0600	\$0.95	\$0.85	\$0.75
	12VDC 50mA	1.4mm	SP-0601	\$0.95	\$0.85	\$0.75
	12VDC 50mA	3.5mm	SP-0602	\$0.95	\$0.85	\$0.75
	12VDC 50mA	6.0mm	SP-0603	\$0.95	\$0.85	\$0.75
↑	Right Angle					
	12VDC 50mA	0.7mm	SP-0604	\$1.00	\$0.90	\$0.80
	12VDC 50mA	1.4mm	SP-0605	\$1.00	\$0.90	\$0.80
	12VDC 50mA	3.5mm	SP-0606	\$1.00	\$0.90	\$0.80
	12VDC 50mA	6.0mm	SP-0607	\$1.00	\$0.90	\$0.80

SPST PCB MOUNT

Specifications	
Rating	12VDC 50mA
Operating Temperature	20~70°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ Min. at 100VDC

Withstand Voltage: 250VAC for 1 minute
Contact Arrangement: SPST N.O.
Momentary action

SQUARE



ROUND

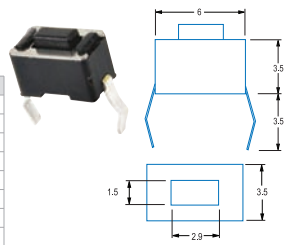


See website for full data sheet

↑		Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC 50mA Square	SP-0608	\$1.25	\$1.10	\$0.97
	12VDC 50mA Round	SP-0609	\$1.25	\$1.10	\$0.97

SPST PCB - 2 PIN

Specifications	
Rating	12VDC 50mA
Operating Temperature	-16~60°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	2 pin SPST N.O.
Action	Momentary
Size	6 x 3.5 x 3.5mm



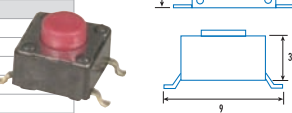
↑		Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC 50mA PCB Mount	SP-0611	\$0.95	\$0.85	\$0.75

SPST SMD - PACK OF 10

This switch is similar to SP-0600 but surface mount.

SMD

Specifications	
Size	6x6mm
Height	3.85mm
Contact Arrangement	SPST N.O.
Contact Rating	50mA, 12VDC
Contact Resistance	100mΩ max



↑		Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC 50mA Pkt 10	SP-0610	\$13.95	\$12.35	\$10.95

SPST PCB MOUNT SNAP ACTION - ROUND



PCB Mount, single pole, momentary. Suitable for keyboards, security systems, etc. Available in 5 colours.

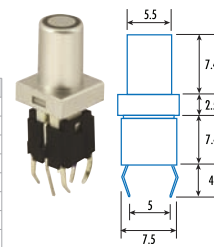
- These switches are normally open SPST. When button is depressed the switch closes, but only while the button is down.
- Contact rating 10mA/35V DC. Pin spacing 5mm

↑		Cat.	Qty 1+	Qty 10+	Qty 25+
	35VDC 10mA Red	SP-0720	\$1.45	\$1.30	\$1.15
	35VDC 10mA Black	SP-0721	\$1.45	\$1.30	\$1.15
	35VDC 10mA Yellow	SP-0722	\$1.45	\$1.30	\$1.15
	35VDC 10mA White	SP-0723	\$1.45	\$1.30	\$1.15
	35VDC 10mA Green	SP-0724	\$1.45	\$1.30	\$1.15

SPST PCB MOUNT WITH LED

- Vertical
- Metallic look

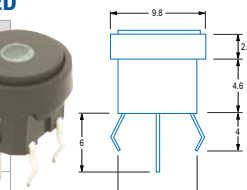
Specifications	
Rating	12VDC 50mA
Operating Temperature	-50 ~ 70° C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ min at 100VDC
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	SPST N.O.
Action	Momentary
LED Power Supply	3.5-4V DC @ 25mA



↑	Vertical	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC 50mA Red	SP-0612	\$4.45	\$3.95	\$3.45
	12VDC 50mA Green	SP-0613	\$4.45	\$3.95	\$3.45
	12VDC 50mA Blue	SP-0614	\$4.45	\$3.95	\$3.45

SPST PCB MOUNT - VERTICAL WITH LED

Specifications	
Rating	12VDC 50mA
Operating Temperature	-50 ~ 70° C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ min at 100VDC
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	SPST N.O.
Action	Momentary
LED Power Supply	3.5-4V DC @ 25mA



↑		Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC 50mA Red	SP-0620	\$3.95	\$3.45	\$3.15
	12VDC 50mA Green	SP-0621	\$3.95	\$3.45	\$3.15
	12VDC 50mA Blue	SP-0622	\$3.95	\$3.45	\$3.15

ATX COMPUTER POWER SUPPLY SWITCH

Replacement Power Switch. 250VAC 10A*. Complete with connecting cable & 2 pin plug.



*Note: rating for switch only (not header socket).

↑		Cat.	Qty 1+	Qty 10+	Qty 25+
	250VAC 10A	SP-0748	\$14.95	\$13.35	\$11.70

BEDLAMP SWITCH

BEDLAMP SWITCH

- Panel hole 10mm
- 250VAC 50Hz
- Rated current 2A (Resistance) 1A (Tungsten Filament)
- Cutout 16(dia.)mm
- Single pole - single throw

SORRY! WE'VE TRIED TO FIND A DPST VERSION OF THIS SWITCH BUT IT JUST DOES NOT SEEM TO BE AVAILABLE.



↑		Cat.	Qty 1+	Qty 10+	Qty 25+
	240VAC 2A SPST	SP-0736	\$1.95	\$1.75	\$1.55

TOGGLE SWITCHES

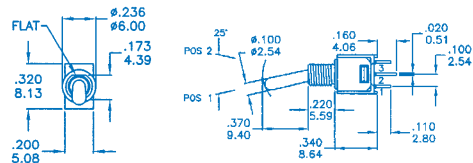
TOGGLE SWITCHES


SOANAR

General Specifications:	Sub Miniature	Miniature
Electrical life (make - and - break cycles at full load)	30,000	40,000
Contact resistance (@ 2 - 4VDC @ 100mA)	20MΩ	10MΩ
Insulation resistance (any contact to body)	1,000MΩ	1,000MΩ
Dielectric strength (@ sea level)	1,000VRMS	1,000VRMS
Contact rating (with resistive load)	1A @ 250VAC	2A @ 250VAC
Contact rating (with resistive load)	3A @ 28VDC	5A @ 28VDC

SUB-MINIATURE

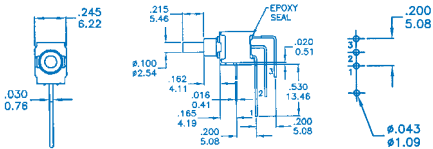
SPDT - SOLDER TAG - THREADED BUSH



Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
SPDT (on - on)	ST-0300	\$2.95	\$2.60	\$2.30

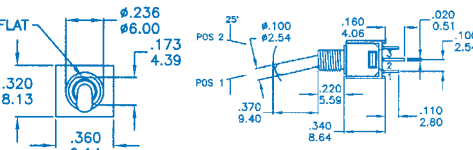
SPDT - HORIZONTAL PCB MOUNT

Momentary on when depressed.



Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
SPDT (on-mom)	SP-0380	\$3.95	\$3.45	\$3.15

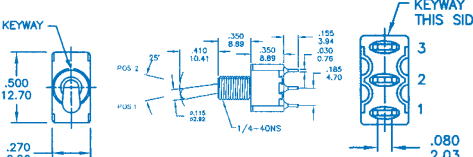
DPDT - SOLDER TAG - THREADED BUSH



Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
DPDT (on - on)	ST-0310	\$2.95	\$2.60	\$2.30

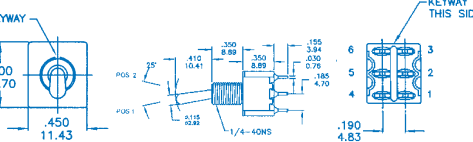
MINIATURE

SPDT - SOLDER TAG WITH THREADED BUSH



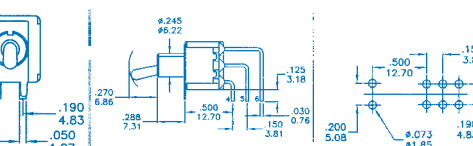
Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
SPDT (on - on)	ST-0335	\$2.95	\$2.60	\$2.30
SPDT Centre Off (on-off-on)	ST-0336	\$3.45	\$3.05	\$2.75

DPDT - SOLDER TAG WITH THREADED BUSH



Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
DPDT (on - on)	ST-0355	\$3.75	\$3.30	\$2.95
DPDT Centre Off (on - off - on)	ST-0356	\$4.50	\$3.95	\$3.60
DPDT Mom Centre Off (mom-off-mom)	ST-0358	\$4.95	\$4.45	\$3.90
DPDT Mom (on - mom)	ST-0357	\$4.50	\$3.95	\$3.60

DPDT - HORIZONTAL PCB MOUNT

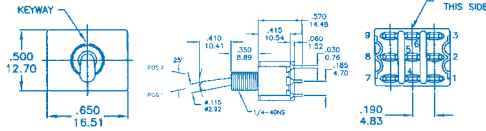


Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
DPDT Threaded Bush (on - on)	ST-0365	\$4.95	\$4.45	\$3.90

MINIATURE (CONTINUED)

3PDT MINI

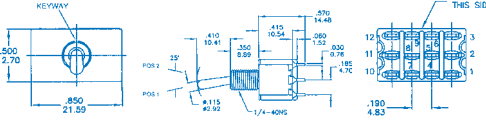
Hole cutout 6mm



Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
3PDT (on - on)	ST-0505	\$7.95	\$6.95	\$6.25

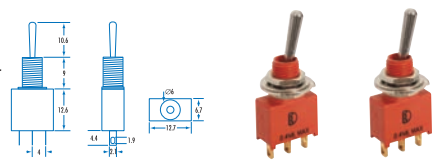
4PDT MINI

Hole cutout 6mm



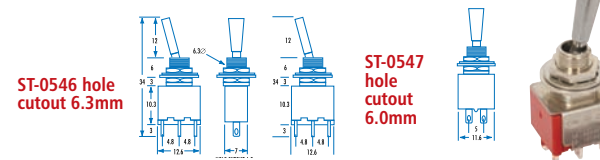
Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
4PDT (on - on)	ST-0506	\$8.95	\$7.95	\$6.95

SEALED MINIATURE

 Ideal for use in wet or moist areas.
 Rated at 2A, 250VAC.
 Splash post IP54 rated.


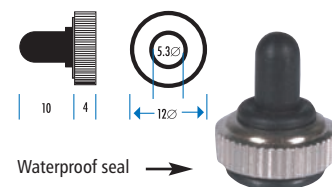
Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
SPDT (on - on)	ST-0554	\$6.95	\$6.25	\$5.50
DPDT (on - on)	ST-0555	\$7.95	\$6.95	\$6.25

MINIATURE FLATTENED ACTUATOR



Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
SPDT (on - on)	ST-0546	\$5.50	\$4.90	\$4.30
DPDT (on - on)	ST-0547	\$5.95	\$5.25	\$4.75

RUBBER BOOT WITH SEAL TO SUIT MINI TOGGLES

 This waterproof hood replaces the standard mounting nut and has an integrated 'O' ring to seal your equipment from outside moisture.
 • Suits our mini toggle switches.
 • True waterproof seal


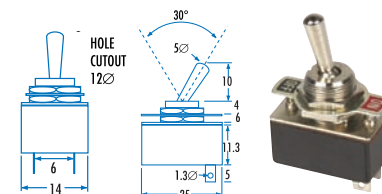
Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
	ST-0594	\$1.85	\$1.65	\$1.45

STANDARD PANEL MOUNT TOGGLE SWITCHES

SPST

 Body size 26 x 14mm,
 clearance 20.5mm,

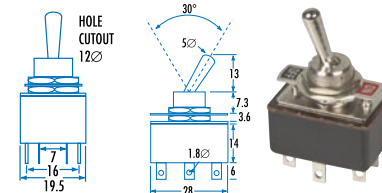
- Mounting hole 12mm.
- Rated 2A 250V.
- Solder terminals



Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 2A (on - off)	ST-0570	\$2.65	\$2.30	\$2.07

DPDT

- Body size 29.5 x 18mm
- Clearance 23mm
- Mounting hole 12mm
- Rated 3A 250V
- Solder terminals



Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 3A (on - off)	ST-0572	\$2.95	\$2.60	\$2.30

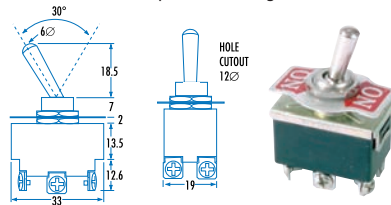
TOGGLE SWITCHES

TOGGLE SWITCHES (CONTINUED)

DPDT - EXTRA HEAVY DUTY

Rated at 10A 250VAC, this switch will handle mains power switching.

- Screw terminals
- 12mm mounting hole.

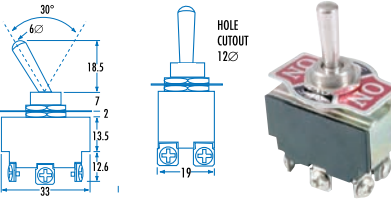


↑	Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	DPDT 250VAC 10A (on - on)	ST-0575	\$4.95	\$4.45	\$3.90

DPDT - HEAVY DUTY CENTRE OFF

Huge 10A 125V rating, chrome toggle with on/off indicator plate.

- DPDT centre off.
- Body size 35 x 20mm, clearance 26mm, mounting hole 12mm.
- Screw terminals. Same physical size as ST-0575 above.

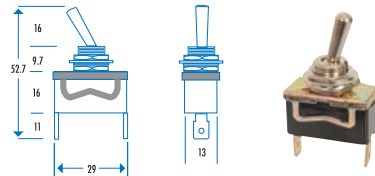


↑	Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	DPDT 125VAC 10A (on - off - on)	ST-0576	\$4.95	\$4.45	\$3.90

SPST

Ideal for any high current 12VDC switching application. Our ST-0578 Missile Switch Cover is perfectly suited to this switch.

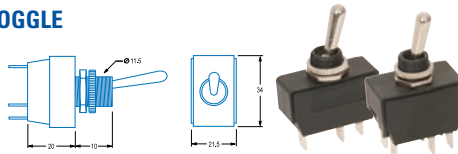
- Body size 29.5 x 17mm
- Mounting hole 12mm
- Rated 20A 12VDC



↑	Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	12VDC 20A Momentary (off - mom)	ST-0577	\$6.50	\$5.75	\$4.95
↑	12VDC 20A Toggle (on - off)	ST-0579	\$5.95	\$5.25	\$4.75

HEAVY DUTY TOGGLE

- Mounting hole 11.5mm
- UL61058 rating: 12(4)A 250VAC
- ST-0586 is Centre-Off.

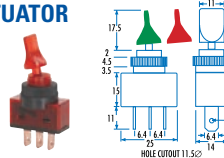


↑		12VDC	277VAC	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	SPST	20A	20A	ST-0581	\$4.95	\$4.45	\$3.90
↑	SPDT	20A	20A	ST-0583	\$5.45	\$4.90	\$4.30
↑	DPDT	20A	16A	ST-0585	\$7.95	\$6.95	\$6.25
↑	DPDT - C/Off	20A	16A	ST-0586	\$7.95	\$6.95	\$6.25

12V SPST ILLUMINATED DUCKBILL ACTUATOR

Actuator illuminates when switch is on.

- Two colours available.
- Rated at 12VDC 10A SPST.
- QC tab termination 6.8mm (PT-4507)

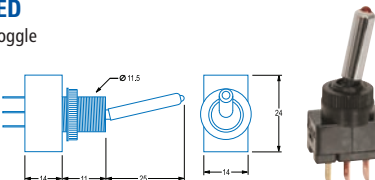


↑	Brackets indicate switch position	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	SPST 12VDC 10A Red (on - off)	ST-0580	\$3.95	\$3.45	\$3.15
↑	SPST 12VDC 10A Green (on - off)	ST-0582	\$3.95	\$3.45	\$3.15

12V SPST ILLUMINATED

Illuminated by an LED in the toggle for easy identification.

- Illuminated red
- Rated for 12VDC 20A
- Mounting hole 11.5mm

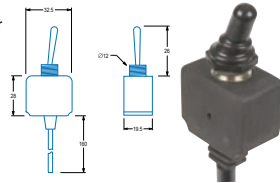


↑		Cat.	Qty 1+	Qty 10+	Qty 25+
↑	SPST 12VDC 20A	ST-0587	\$4.95	\$4.45	\$3.90

24V 15A SPST SEALED TOGGLE

This large toggle switch is specially designed for marine conditions. A weatherproof rubber boot covers the actuator, and the switch mechanism is encapsulated in rubber. For this reason, 150mm fly leads are attached instead of the usual terminals. Not only limited to marine use, it can also be used as an ultra-durable switch in many applications.

- Ideal for marine or automotive use.
- Max volt rating: 24V @ 15 amps



↑		Cat.	Qty 1+	Qty 10+	Qty 25+
↑	SPST 24VDC 15A	ST-0574	\$12.95	\$11.35	\$10.35

MISSILE SWITCH PROTECTIVE COVER

Military style missile switch cover featuring a heavy duty hinged, spring return protective cover. Covers turn switch off when snapped down. Fit any toggle switch with a 12mm mounting hole and appropriate length actuator.

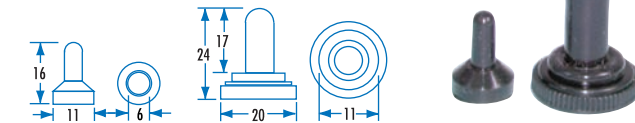
SWITCH (Cat. ST-0579) SHOWN MOUNTED IN MISSILE COVER (switch not included).

WHEN COVER IS DOWN, ACTUATOR CANNOT MOVE



↑		Cat.	Qty 1+	Qty 10+	Qty 25+
↑	Red	ST-0578	\$6.95	\$6.25	\$5.50
↑	Carbon Fibre Style	ST-0584	\$8.95	\$7.95	\$6.95

SPLASHPROOF HOODS FOR TOGGLE SWITCHES



These hoods simply screw over the toggle switch to deter ingress of water.

MINIATURE - INCLUDES NUTS FOR BOTH MINI & ULTRA-MINI TOGGLE SWITCHES.

↑		Cat.	Qty 1+	Qty 10+	Qty 25+
↑		ST-0590	\$1.85	\$1.65	\$1.45

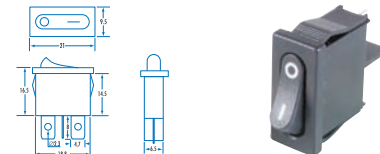
STANDARD (LARGE)

↑		Cat.	Qty 1+	Qty 10+	Qty 25+
↑		ST-0592	\$2.85	\$2.53	\$2.23

ROCKER SWITCHES

SPST - ULTRA MINI

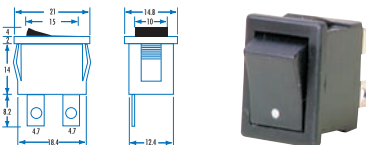
- Snap in fitting.
- SPST 250VAC 6A.
- Cutout size 6.5(W) x 19(H)mm.
- Black body, black actuator.
- QC tab termination 6.4mm (PT-4607)



↑		Cat.	Qty 1+	Qty 10+	Qty 25+
↑	250VAC 6A SPST	SK-0975	\$1.95	\$1.75	\$1.55

SPST - MINI

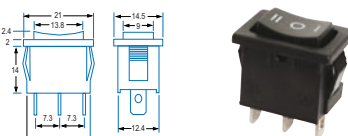
- Dimensions: 21 x 15mm
- Panel cut out size 13 x 19.5mm
- QC tab termination
- SPST 240V 6A
- Black actuator



↑		Cat.	Qty 1+	Qty 10+	Qty 25+
↑	240VAC 6A SPST	SK-0984	\$1.95	\$1.75	\$1.55

SPDT - CENTRE OFF

- Latching
- Voltage: 250VAC
- Current: 6 Amp



↑		Cat.	Qty 1+	Qty 10+	Qty 25+
↑	250VAC 6A SPDT	SK-0991	\$4.95	\$4.45	\$3.90

ROCKER SWITCHES

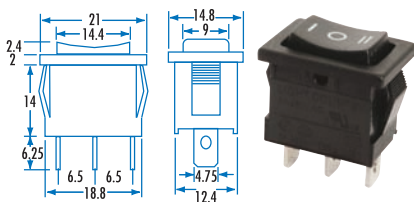
ROCKER SWITCHES (CONTINUED)

SPDT - MINI - CENTRE OFF

SPRING RETURN BOTH SIDES

Momentary contacts with spring return to centre on both sides.

- Mini QC tab termination 6.4mm (PT-4607)
- Contact arrangement SPDT N.O.

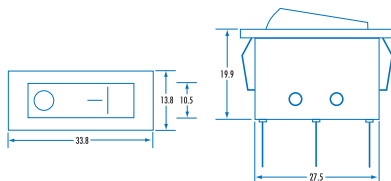


↑		Cat.	Qty 1+	Qty 10+	Qty 25+
250V 6A	SPDT	SK-0987	\$4.95	\$4.45	\$3.90

SPST - ILLUMINATED

Black body with illuminated actuator. Ideal replacements for appliances.

- Snap in fitting.
- QC tab termination 6.8mm (PT-4507)
- Cutout: 33.8 x 13.8mm



↑	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
240VAC 15A	Blue	SK-0976	\$3.50	\$3.15	\$2.75
240VAC 15A	Red	SK-0978	\$3.50	\$3.15	\$2.75
240VAC 15A	Green	SK-0979	\$3.50	\$3.15	\$2.75

CONDURA STYLE ROCKER SWITCHES

INDIVIDUAL "CONDURA" STYLE DC ROCKER SWITCHES

These are the superb looking rocker switches that you have seen in the cockpits of the 70-100ft luxury motor cruisers recently. They would look great in your 4WD, RV, Caravan or any other application as well. The base switch supplied (rated at 12V 20A, 24V 10A) comes with a double-LED illumination (low in OFF, high in the ON position), a standard rocker cover and a standard range of decals to customise the switch to your application. Typical decals are symbols for: windscreen wipers, horn, heater, etc; there are dozens of these decals included.

Also available are a set of special laser-etched covers with the following graphic symbols to really create a professional finish. You need to buy the basic switch (in blue, white or red illumination) and then the custom cover (if required.)



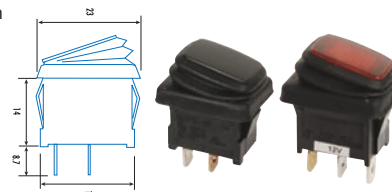
↑	Switches	Cat.	Qty 1+	Qty 10+	Qty 25+
	SPDT Rocker - White	SK-0910	\$12.95	\$11.35	\$10.35
	SPDT Rocker - Red	SK-0912	\$12.95	\$11.35	\$10.35
	SPDT Rocker - Blue	SK-0914	\$12.95	\$11.35	\$10.35
	SPDT Rocker - Amber	SK-0916	\$12.95	\$11.35	\$10.35
↑	Laser-etched rockers	Cat.	Qty 1+	Qty 10+	Qty 25+
	12V Power	SK-0920	\$2.95	\$2.60	\$2.30
	Fridge	SK-0921	\$2.95	\$2.60	\$2.30
	Aux Battery	SK-0922	\$2.95	\$2.60	\$2.30
	Camper Power	SK-0923	\$2.95	\$2.60	\$2.30
	Spot Lights	SK-0924	\$2.95	\$2.60	\$2.30
	Horn	SK-0925	\$2.95	\$2.60	\$2.30
	Rear View Camera	SK-0926	\$2.95	\$2.60	\$2.30
	Inverter	SK-0927	\$2.95	\$2.60	\$2.30
	Driving Lights	SK-0928	\$2.95	\$2.60	\$2.30
	Thermofan	SK-0929	\$2.95	\$2.60	\$2.30

SPST IP56 RATED MINI ROCKER SWITCH

SPST mini rocker switches with spade QC lugs. Sealed with a rubber boot and IP56 rated.

Two types available:

- Black: SK-0968
- Red (illuminated): SK-0969
- Cutout: 18.8 x 12.5mm

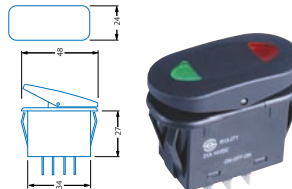


↑		Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	Black	SK-0968	\$5.75	\$4.95	\$4.60
12VDC 16A	Red - Illuminated	SK-0969	\$6.75	\$5.95	\$5.25

SPDT IP65 ILLUMINATED CENTRE OFF ROCKER SWITCH

IP65 rated, illuminated switch for automotive and marine applications. Illuminates one side red and one side green.

- On-Off-On
- Rating: 14VDC, 21A
- Cutout size: 34 x 21mm

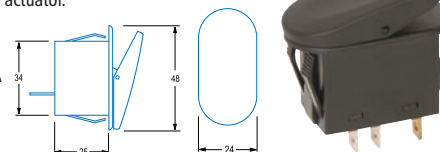


↑		Cat.	Qty 1+	Qty 10+	Qty 25+
14VDC 21A	SPDT	SK-0999	\$12.95	\$11.35	\$10.35

SPST ILLUMINATED IP56 RATED ROCKER SWITCH

IP56 rated, large rocker actuator.

- SPST
- Illuminated red
- Rated for 12VDC 20A
- Mounting hole 20.5 x 37mm

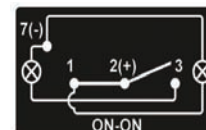


↑		Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 20A Red Illuminated		SK-0997	\$12.95	\$11.35	\$10.35

LET'S BUILD



Note: Switch cover designs may vary slightly to ones shown



SEE OUR "CONDURA" STYLE USB SOCKETS ON PAGE 297

ROCKER SWITCHES

ROCKER SWITCHES (CONTINUED)

INLINE LOW VOLTAGE SWITCH

Simply connect your plug pack adaptor into this handy in-line switch to provide quick and easy on/off control. Much easier than unplugging the connector or reaching for the power point when you want to switch your device on or off. Fitted with 2.1mm DC plug & socket and rated at 24VDC at 2 amps.

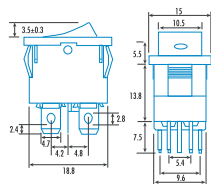


	Cat.	Qty 1+	Qty 10+	Qty 25+
24VDC 2A	SK-0998	\$7.95	\$6.95	\$6.25

DPST - MINI - NEON ILLUMINATED

- 240VAC
- Illuminated actuator
- Solder terminals
- QC tab termination 6.4mm (PT-4607)

AS USED IN OUR POWER BOARDS

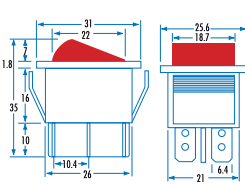


	Cat.	Qty 1+	Qty 10+	Qty 25+
240VAC 12A DPST Red	SK-0995	\$4.95	\$4.45	\$3.90

DPDT - LARGE - NEON ILLUMINATED

Mains Illuminated. DPDT 240VAC 15 amp.

- Black body, available in red or green illumination.
- Spade lug connections.
- Cutout 27 x 22mm.
- QC tab termination 6.8mm (PT-4507)

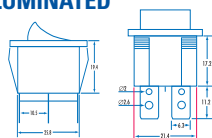


	Cat.	Qty 1+	Qty 10+	Qty 25+
240VAC 15A DPDT Red	SK-0982	\$4.95	\$4.45	\$3.90
240VAC 15A DPDT Green	SK-0983	\$4.95	\$4.45	\$3.90

DPDT - LARGE - NON ILLUMINATED

DPDT switch with black body and black actuator.

- QC tab termination
- 240VAC 16A.
- Snap in fitting.

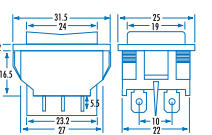


	Cat.	Qty 1+	Qty 10+	Qty 25+
240VAC 16A	SK-0981	\$3.95	\$3.45	\$3.15

DPDT - LARGE - CENTRE/OFF

Spring Return Both Sides, Momentary contacts with spring returns to centre on both sides. These are commonly used for car power antennas and power windows.

- Rated at 10A 250VAC.
- QC tab termination 6.4mm (PT-4607)



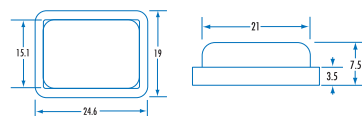
	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	SK-0980	\$7.95	\$6.95	\$6.25

WATERPROOF CAPS FOR ROCKER SWITCHES

Push-on, clear plastic caps to suit rocker switches.

SUITS MINI SWITCHES

Suits switches SK-0984, SK-0985 and SK-0987.



SUITS LARGE ROCKER SWITCHES

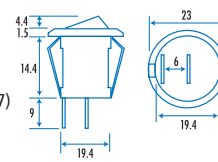
Suits switches SK-0980, SK-0981, SK-0982 and SK-0983, .



	Cat.	Qty 1+	Qty 10+	Qty 25+
Suits Larger Rocker Switches	SK-0972	\$1.95	\$1.75	\$1.55
Suits Mini Rocker Switches	SK-0970	\$1.40	\$1.25	\$1.10

SPST - ROUND ACTUATOR

- Snap fits into a 20mm round hole
- 10 amps @ 250VAC
- Black body with black actuator
- QC tab termination 6.4mm (PT-4607)

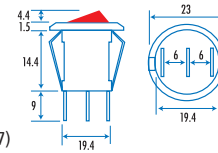


	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	SK-0960	\$2.25	\$1.95	\$1.80

SPST - ROUND ACTUATOR

Illuminated Red

- Snap fits into a 20mm round hole
- 6A @ 250VAC
- Black body with red neon actuator
- QC tab termination 6.4mm (PT-4607)

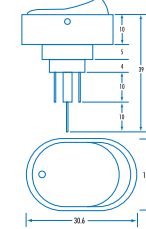


	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A	SK-0962	\$2.95	\$2.60	\$2.30

SPST - ROCKER ACTUATOR

LED Illuminated - Red
This is a classy switch. It is a rocker, but only needs a round 12mm hole (with 1mm flat). It is SPST and can handle a massive 30 amps at 12VDC. There is an LED in the actuator which lights from a 9 - 12V source.

- QC tab termination 6.8mm (PT-4507)

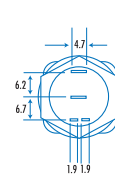


	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC 30A	SK-0955	\$4.95	\$4.45	\$3.90

SPST - PADDLE

LED Illuminated - RED
Paddle type actuator with built in red LED

- Mounts easy in a 20mm hole.
- 10 amps @ 250VAC
- LED requires 12V @ 20mA
- Black body
- QC tab termination 6.8mm (PT-4507)
- Solder tabs for LED

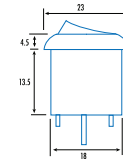


	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	SK-0964	\$4.95	\$4.45	\$3.90

DPDT ROUND ACTUATOR - RED

This rocker mounts in a round 18mm hole.

- DPDT
- 6 amps @ 250VAC
- Black body, red actuator
- Solder pins
- 18mm mounting hole

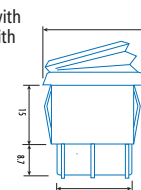


	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A	SK-0994	\$4.95	\$4.45	\$3.90

DPDT - ROUND ACTUATOR - IP65

DPDT round rocker switches with mini spade QC lugs. Sealed with a rubber boot and IP65 rated.

- 20mm mounting hole



	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A Black	SK-0966	\$6.95	\$6.25	\$5.50
250VAC 6A Red - Illuminated	SK-0967	\$7.95	\$6.95	\$6.25

SECURITY SWITCHES

TAMPER SWITCHES

ALARM TAMPER STYLE

This switch mounts behind a alarm module, bell or other item. If the device is tampered with or pulled from the wall, the alarm will be triggered. SPST. 18mm mounting hole. Contacts close when button depressed.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
SPST	LA-5066	\$2.95	\$2.60	\$2.30

TAMPER (PIN) STYLE

Low cost spring loaded switch, simply make to frame (or earth) when pin is released i.e. by operating car or cabinet door, etc. 57mm overall, 12mm pin travel.

- Bullet connector termination



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Pkt 2	LE-8775	\$5.95	\$5.25	\$4.75

METAL TAMPER (PIN) STYLE

Especially good for car bonnets, this heavy duty pin switch is nickel plated for protection from corrosion in hostile environments. The plunger is plastic and can be cut to suit the required length/depth. Supplied with locking nuts and star washer. The bezel's mounting depth is also adjustable. Termination is via a 6.4mm spade lug.



Length (main body):	38mm	Including plug & lug:	70mm
Shaft diameter:	7.75mm	Fascia nut size:	11mm
Locking nut size:	12mm	Travel (max):	13.5mm.

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Pkt 2	LE-8776	\$7.95	\$6.95	\$6.25

METAL FASCIA INSET PIN SWITCH

Inset pin switch with plated metal fascia. Suitable for many cars as a replacement door switch. The sturdy plunger can be cut to required length. Termination via right angle 6.4mm spade lug.

Fascia: 34.5 x 16.5mm Pin: 27(L) x 8(dia)mm
Overall depth : 51mm Travel (max): 8mm
Depth behind fascia: 15mm (not inc lug & pin).



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Pkt 2	LE-8777	\$7.95	\$6.95	\$6.25

VAN SLIDING DOOR STYLE

Double action sliding door switch, primarily designed for van doors and tailgates. Supplied with rubber mounting plates, screws, template stickers and installation instructions. Contacts are rated at a massive 20A @ 12V.



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12VDC 20A	LE-8779	\$18.95	\$16.95	\$14.95

FLOAT SWITCHES

FLOAT SWITCH

VERTICAL OR HORIZONTAL MOUNT NO or NC
Ideal for use in conjunction with solenoid valves, water pumps, etc., this float switch can be made NO or NC (Normally Open or Normally Closed) by the orientation of the float. Horizontally mounted so the float falls, when the fluid level rises it will switch ON at maximum float height. Mounting the switch so the float rises upwards when the fluid level rises above switch height it will switch OFF. Vertical mounting, with the float down, will switch OFF at a high fluid level. Widely used in marine, automobile, industrial, agricultural fluid level sensing applications.



- 560mm wire leads
- 92.5(L) x 18(D)mm x M16
- Float Rise height: 40mm from centreline

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
SF-0920		\$19.95	\$17.70	\$15.70

TOP MOUNTING FLOAT SWITCH (LEVEL DETECTOR)

This unit can be fitted to the lid or top cover of a tank. Mounting is via an 8mm drill hole, a plastic locking nut & 'O' ring are supplied. Float movement is approx 20mm so an air gap between required 'full' level & top of tank can be accommodated if necessary. (The travel could be reduced, by relocating 'C' clip retainer.) The switch is rated at 200V 0.5A so it is not suitable to directly switch mains. When container is full the switch is open. Ideal for drinking water.

- 70(L)mm overall x 23(Dia.)mm (float)



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
SF-0922		\$17.95	\$15.95	\$14.35

MERCURY & REED SWITCHES

MINI MERCURY SPST

With a robust plastic housing, this switch has a mounting tab - you can screw it down - or use the self adhesive strip supplied. It has a 30cm lead. Switch contacts are open when the device is mounted horizontally. Dimensions: 33 (L) x 8(W) x 8.5(D)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
SPST	SM-1044	\$4.45	\$3.95	\$3.45

NC REED SWITCH*

Ideal for burglar alarms. **Coin not included for size purposes only**

- Total length: 44mm
- Contact rating: 10W
- Switching current: 0.5A (max)
- Glass length: 14mm
- Switching voltage: 200VDC (max)
- Carrying current: 1.0A (max)

*Normally open, but closed when near magnet



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
200VDC 500mA	SM-1002	\$1.95	\$1.75	\$1.55

MERCURY SWITCH SPST

Glass encapsulated

- 125VAC 3 amp AC. SPST.
- Size glass 18(L)mm x 5.5mm dia.



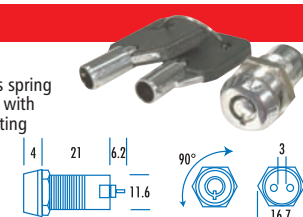
Coin not included for size purposes only

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC 3A SPST	SM-1035	\$2.75	\$2.45	\$2.15

BARREL LOCKS

BARREL KEY, MINI - SPST

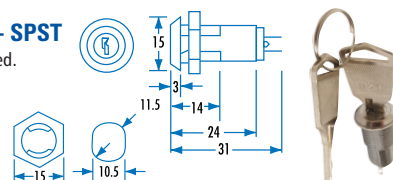
Chrome plated SPST mini key switch features spring return momentary operation and is supplied with two mini barrel keys. Requires 28mm mounting depth and a panel cutout of 12mm. Contact rating: 0.5A@250VAC / 1A@125VAC



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 500mA	SM-1034	\$9.95	\$8.75	\$7.75

STANDARD KEY, MINI - SPST

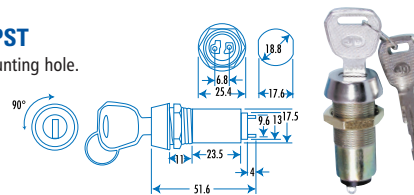
Rated at 3 amps. 2 keys supplied. Panel cutout 12mm. Mounting depth 29mm. Contact rating: 1A 125VAC / 0.5A @250VAC.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC 1A	SM-1027	\$9.95	\$8.75	\$7.75

STANDARD SIZE - SPST

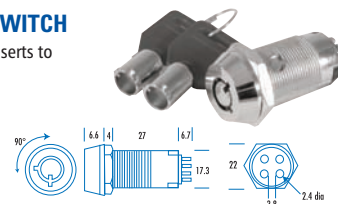
Solid barrel type. 19mm mounting hole. SPST action. Supplied with 2 (two) keys. Rated @ 250V 2A.



↑	250VAC 2A	Cat.	Qty 1+	Qty 10+	Qty 25+
	Random Keys	SM-1030	\$12.95	\$11.35	\$10.35
	Keyed Alike Type A	SM-1029	\$12.95	\$11.35	\$10.35
	Keyed Alike Type B	SM-1031	\$12.95	\$11.35	\$10.35

DPST CHANGE-OVER KEY SWITCH

Uses tubular keys with black plastic inserts to easily identify them. It has 2 positions and the key is removable from both. There are 4 connection terminals, is a change-over type - ie. connection DPST. Contact rating: 2A, 250VAC.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
250VAC 2A	SM-1032	\$13.95	\$12.35	\$10.95

SLIDE & MICRO SWITCHES

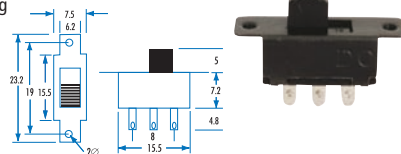
SLIDE SWITCHES

These slide switches have silver plated contacts, contact ratings of 0.3A @ 100V min, 25mΩ contact resistance, 100MΩ plus insulation resistance (at 500VDC) & endure about 10,000 cycles.

DPDT PANEL MOUNT SUB MINIATURE

Break before make (non shorting contacts).

- Size 23(L) x 7(W)mm
- Actuator height 5mm.
- Mounting holes 19mm apart.
- Screws to mount switch use Cat. HP-0390.

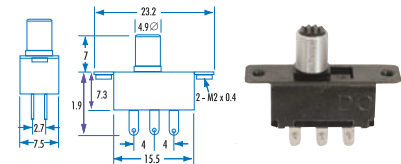


	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	SS-0852	\$1.45	\$1.30	\$1.15

DPDT PANEL MOUNT SUB MINIATURE

(Spun aluminium actuator)

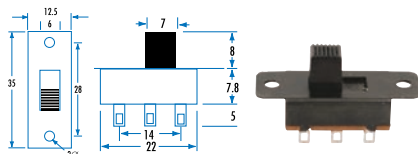
- Panel mount.
- Size 23(L) x 7(W)mm.
- Actuator height 7mm.
- Mounting holes 19mm apart.



	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	SS-0812	\$1.45	\$1.30	\$1.15

DPDT PANEL MOUNT MINIATURE

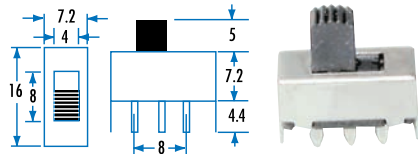
- Size 35(L) x 13(W)mm.
- Actuator height 6mm.
- Mounting holes 28mm apart
- 3mm diameter holes for screws.



	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	SS-0821	\$1.25	\$1.10	\$0.97

DPDT PCB MOUNT SUB MINIATURE

- Size 16(L) x 7.2(W)mm.
- Actuator height 5mm.

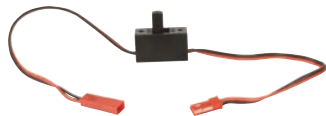


	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	SS-0823	\$1.45	\$1.30	\$1.15

INLINE JST SWITCH KIT

JST switches and connectors provide an unobtrusive solution to power control. They are small so will fit comfortably in the chassis of an RC vehicle. This kit includes a JST switch with a male and female JST connector on each end attached to a 140mm wire. Great for hobby applications such as model trains, remote control helicopters and cars, or simple around the house projects that require discrete and simple switching.

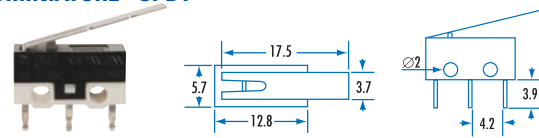
- Includes mounting bracket and screws
- Switch dimensions: 25(L) x 25(H) x 9(D)mm



	Cat.	Qty 1+	Qty 10+	Qty 50+
↑	SS-0826	\$3.95	\$3.45	\$3.15

MICROSWITCHES

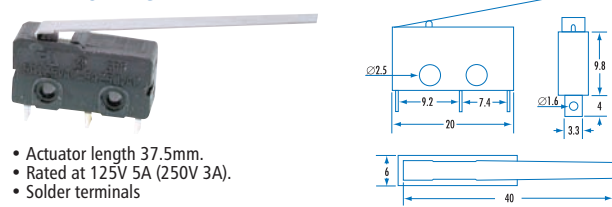
SUBMINIATURE - SPDT



- Actuator length 14mm
- Rated at 125V 3A
- Solder terminals

	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	125V 3A SPDT On - On SM-1036	\$3.95	\$3.45	\$3.15

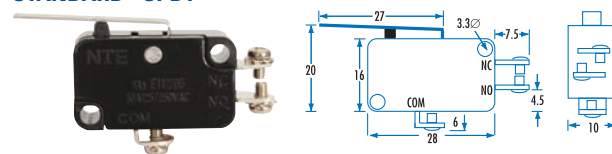
MINIATURE - SPDT



- Actuator length 37.5mm.
- Rated at 125V 5A (250V 3A).
- Solder terminals

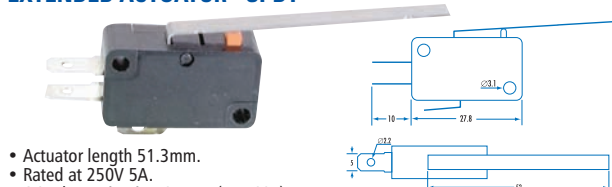
	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	125V 3A SPDT On - On SM-1038	\$4.95	\$4.45	\$3.90

STANDARD - SPDT



	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	240VAC 10A SPDT On - On SM-1040	\$3.75	\$3.30	\$2.95

EXTENDED ACTUATOR - SPDT



- Actuator length 51.3mm.
- Rated at 250V 5A.
- QC tab termination 6.4mm (PT-4607)

	Cat.	Qty 1+	Qty 10+	Qty 25+
↑	250VAC 5A SPDT On - On SM-1039	\$3.75	\$3.30	\$2.95

RAINCHECK!

If your local Jaycar store has sold out of a currently advertised line we will be happy to issue you with a 'raincheck'.
Conditions apply - see page 528 for details.

LET'S FIND EVERYTHING YOU NEED!

FROM
\$14.95
TH-1768



NIBBLING TOOL P141

FROM
\$13.95
NM-2836



LIQUID TAPE P30

FROM
\$2.75
PT-4607



SPADE CONNECTORS P181

FROM
\$11.50
NA-1004



CONTACT CLEANER P29

FROM
\$9.95
NA-1034



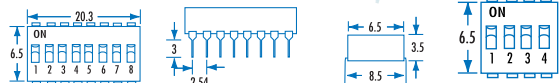
CARBON GREASE P28

INDEX TYPE SWITCHES

DIP SWITCHES

DIP SWITCHES

- End stackable
- Moulded 0.3" IC packing outline for automatic insertion
- Smaller sized
- Twin contact design
- Gold plated contact & tin plated terminals.
- Switching: 25mA 24VDC
- Non-Switching: 100mA 50VDC
- Contact Resistance: Initial 50mΩ max
- Dielectric Strength: 500VDC min 1 minute

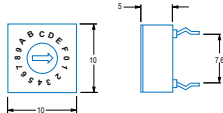


↑	Type	Description	Cat.	Qty 1+	Qty 10+	Qty 25+
	2 Way	4 pin DIP	SM-1012	\$1.55	\$1.35	\$1.20
	3 Way	6 pin DIP	SM-1013	\$1.75	\$1.55	\$1.40
	4 Way	8 pin DIP (low profile)	SM-1020	\$1.95	\$1.75	\$1.55
	6 Way	12 pin DIP	SM-1015	\$2.15	\$1.90	\$1.70
	8 Way	16 pin DIP (low profile)	SM-1024	\$2.40	\$2.15	\$1.90
	10 Way	20 pin DIP	SM-1017	\$2.65	\$2.30	\$2.07
	12 Way	24 pin DIP	SM-1018	\$2.90	\$2.60	\$2.30

BINARY CODED DIL ROTARY SWITCHES

These tiny switches are designed for PCB use. These pins are moulded in and fully sealed. The body is moulded in UL 94V-0 flame-retardant plastic.

Specifications	SR-1220/SR-1222
Contact rating	Switching 25mA@24VDC
Non Switching	100mA @50VDC (dry contact switching)
Contact Resistance	100mΩ max
Insulation Resistance	1,000MΩ (min) at 100VDC
Dielectric Strength	250V AC for 1 minute
Temp (operating)	-25°C to +70°C
Max Rotational	
Torque Required	500gf-cm
Operational Life	2,000 steps/min, switching
Solderability After flux	230 +/-5°C for 5 +/- 0.5 sec

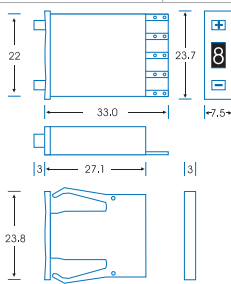


↑	Binary Coded Hex	Cat.	Qty 1+	Qty 10+	Qty 25+
	0 through F output	SR-1220	\$3.95	\$3.45	\$3.15
↑	Binary Coded Decimal	Cat.	Qty 1+	Qty 10+	Qty 25+
	0 through 9 output	SR-1222	\$3.95	\$3.45	\$3.15

0 - 9 BCD PUSHWHEEL

These pushwheel switches can be ganged together to make any combination and can be panel mounted using the optional pair of end caps (SR-1254). Switch positions (0 - 9) indicated via large numbers (white on black) and outputs are BCD encoded. Optional spacers (SR-1256) can be ganged together to provide spacing (7.62mm each) between the switches.

Specifications	SR-1250
Rating	50VAC / 28V DC Max
Switching Current	100mA Max
Continuous Current	500mA Max
Contact resistance	200m ohms Max (initial)
Insulation resistance	100M ohms Min
Dielectric strength	500VAC 1 minute
Operating temperature	-20°C to +65°C
Ambient humidity	75% RH Max
Mechanical life	200,000 steps Min
Electrical life	100,000 steps Min



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Switch	SR-1250	\$9.95	\$8.75	\$7.75
Spacer	SR-1256	\$2.45	\$2.15	\$1.95
End caps - Pair	SR-1254	\$2.45	\$2.15	\$1.95

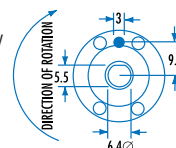
Cat. SR-1250
0 - 9 Push-wheel switch

Cat. SR-1256
Spacer

Cat. SR-1254
End caps to suit (pair)

SEALED PCB ROTARY SWITCHES

These switches have a removable ring with tab which can be inserted into the switch several ways to your particular requirements. For example, if you purchased a 1 pole x 12 way (max) switch you could convert it to, say, 1 pole 7 way between stops. They have a standard 1/4" shaft. Panel hole 10mm. Contact rating 150mA at 240VAC. Cutout 9.5mm.



1 POLE

Configured from 1 pole 2 position through to 1 pole 12 position.

2 POLE

From 2 pole 2 position to 2 pole 6 position

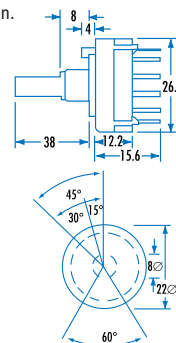
3 POLE

From 3 pole 2 position to 3 pole 4 position

4 POLE

4 pole, 2 and 3 position

- Break before make

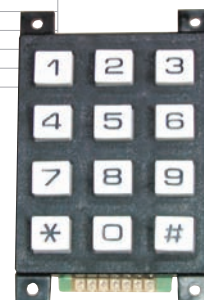
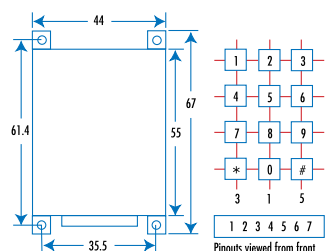


↑	Type	Cat.	Qty 1+	Qty 10+	Qty 25+
	240VAC 150mA 1 pole	SR-1210	\$3.95	\$3.45	\$3.15
	240VAC 150mA 2 pole	SR-1212	\$3.95	\$3.45	\$3.15
	240VAC 150mA 3 pole	SR-1214	\$3.95	\$3.45	\$3.15
	240VAC 150mA 4 pole	SR-1216	\$3.95	\$3.45	\$3.15

12 KEY NUMERIC KEYPAD

This telephone style keypad has many uses. It has 0-9, *, # - 3 x 4 way matrix.

Specifications	SP-0770
Contact rating	20mA, 24VDC
Contact resistance	200Ω max
Life	1,000,000 cycles per key
Contact	Conductive rubber
Size (Key Face)	44(W) x 54(H) x 5(D)mm
Colour	White keys on black background



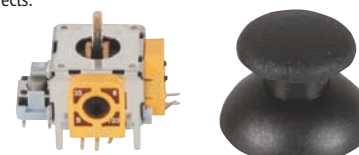
↑	Cat.	Qty 1+	Qty 10+	Qty 25+
24VDC 20mA	SP-0770	\$8.95	\$7.95	\$6.95

JOYSTICK SWITCHES

BOARD LEVEL JOYSTICKS WITH KNOB

This is a joystick very similar to the 'analog' joysticks found on PlayStation® controllers. Two 10k potentiometers, one for each axis, are combined to give directional movements. It also features a push down button when the joystick is pressed and includes a matching rubber-coated knob. Ideal for robotics projects.

Available in surface mount (SMT) and PCB mount.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
PCB Mount	ST-0600	\$9.95	\$8.75	\$7.75
SMT Mount	ST-0602	\$9.95	\$8.75	\$7.75

NEW
2015

BUZZERS

BUZZERS

PCB MOUNT MINI PC PIEZO

Ideal when you need to fit an alarm in a small place. It has its own built-in drive circuit. It offers low current consumption and it's sealed for DIP soldering & washing.

Specifications	AB-3459
Operation voltage	9 - 14V
Rated voltage	12VDC
Current	30mA
SPL	85dB/10cm
Frequency	2.3kHz
Weight	2.4 gram

↑ Dia.	Height	Cat.	Qty 1+	Qty 4+	Qty 10+
12mm	9.5mm	AB-3459	\$4.95	\$4.45	\$3.90

PCB MOUNT PIEZO BUZZER

Specifications:	AB-3458
Operating Voltage	3 - 30V DC
Operating Freq	3.8 kHz
Current Draw	16mA max
SPL	85dB/30cm/12V

↑ Dia.	Height	Cat.	Qty 1+	Qty 4+	Qty 10+
24mm	16mm	AB-3458	\$3.95	\$3.45	\$3.15

PIEZO BUZZER - MINI

It offers medium to loud sound output, low current consumption and is extremely durable. Supplied with fly leads.

Specifications	AB-3462
Operating voltage	3-16VDC
Rated	12VDC
Freq	3.3kHz
Max current at 12V	15mA
SPL	90dB

↑ Dia.	Height	Cat.	Qty 1+	Qty 4+	Qty 10+
22mm	12mm	AB-3462	\$3.95	\$3.45	\$3.15

SURFACE MOUNT BUZZER

Handy solid state buzzer operates between 5-15VDC. Used in many applications

Note: This is an electro-mechanical buzzer

Specifications	AB-3452
Operating voltage	5-15VDC
Rated	12VDC
Max current at 12V	40mA
SPL	79dB/1m

↑ Length	Width	Height	Cat.	Qty 1+	Qty 4+	Qty 10+
31mm	16mm	15mm	AB-3452	\$3.95	\$3.45	\$3.15

WEATHERPROOF BUZZER
6-14VDC

Designed to withstand exposure to rain when mounted outdoors.

- Material: ABS UL-94 1/16" HB High Heat

Specifications	AB-3466
Operating Voltage	6-14VDC
Rated Voltage	12VDC
Current	35mA @ 12V (max)
SPL	85dB / 1m
Frequency	2.8kHz 500Hz

↑ Dia.	Height	Cat.	Qty 1+	Qty 4+	Qty 10+
26mm	16mm	AB-3466	\$16.95	\$14.95	\$13.35

DUAL SOUND PIEZO
INDUSTRIAL TYPE

Similar to SONALERT® earpiercing sound. Non inductive, operates from 1 - 13V DC. Now with both continuous tone and pulsed tone. Red & black for continuous, yellow and black for pulse tone. Ideal for almost all signalling applications.

Specifications	AB-3456
Operating voltage	1 - 13VDC
Rated voltage	12VDC
Current	Single tone 35mA, pulse 20mA
Frequency	2.9kHz
SPL	105dB/30cm single, 100dB/30cm pulse
Pulse Rate	2 - 7 pulse/sec
Mounting	1 x 3mm screw.

↑ Dia.	Height	Cat.	Qty 1+	Qty 4+	Qty 10+
45mm	26mm	AB-3456	\$8.95	\$7.95	\$6.95

PIEZO REVERSING ALARM
AUTOMOTIVE TYPE

Available with both continuous and pulse tone. These are a heavy duty panel mounted piezo. They are very rigidly made and terminals are via screw down or 6.35mm quick disconnect.

- Similar to SONALERT®

Specifications	AB-3464
Operating voltage	4 - 16V
Rated voltage	12V
Max Current @ 12V	25 single, 20 pulse mA
Frequency	2.9kHz
SPL @ 12V	95 single, 90 pulse dB
Pulse Rate @ 12V	0.8 - 1.2 pulse/sec
Mounting Hole	29mm

↑ Dia.	Height	Cat.	Qty 1+	Qty 4+	Qty 10+
43.5mm	34.5mm	AB-3464	\$12.95	\$11.35	\$10.35

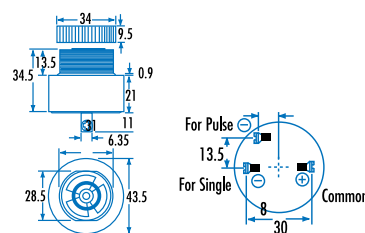
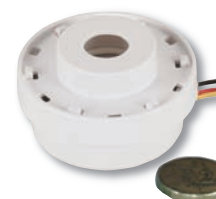
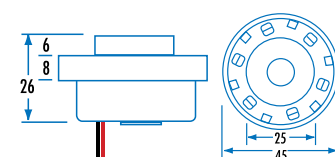
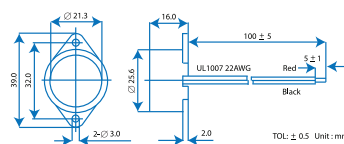
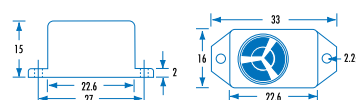
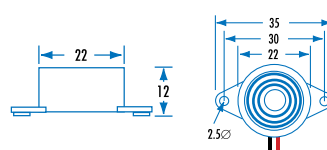
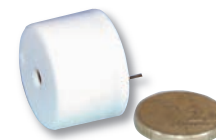
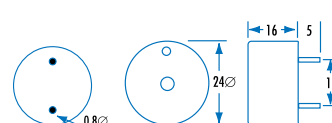
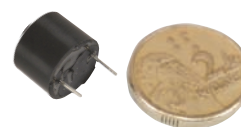
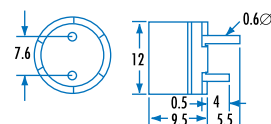
PIEZO TRANSDUCER

LOW PROFILE PIEZO
TRANSDUCER

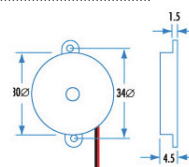
This electro-acoustic transducer contains no electronics but will transform AC voltages to sound pressure waves. It will also generate an AC voltage across its terminals when stimulated with a sound pressure wave.

Specifications	AB-3440
Max. Input voltage	30V pp
SPL	105dB/30cm pulse
Resonant frequency	4,200 +/-500Hz
Resonant Resistance	300 ohm max.
Electrostatic Capacitance	20,000pf +/-30%.

↑ Dia.	Height	Cat.	Qty 1+	Qty 4+	Qty 10+
30mm	5mm	AB-3440	\$3.95	\$3.45	\$3.15



SEE PAGE 392 FOR TECH TIP ON DECIBELS



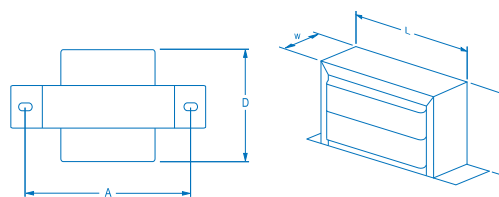
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ELECTROMECHANICAL & ENCLOSURES

TRANSFORMERS

QUICK REFERENCE TRANSFORMER SELECTION

Our range of transformers have not changed much over the years. We have three major categories Power EI Core, Power PCB Mount and Power Toroidals. This year we have added comparison tables for each of these ranges, with key technical specifications for easy reference and selection.



POWER EI CORE

Type	VA	Primary		Secondary			Regulation (%)	Connection		Dimensions (mm)					Weight (kg)	Cat No.	Page No.
		Voltage (V)	Internal Thermal Fuse	Voltage (V)	Current (mA, A)	Winding		Primary	Secondary	A	D	L	W	H			
2840	1.35	240	Yes	9, 4.5	150mA	Centre Tapped	9	Fly Leads	Fly Leads	45	32	37	16	32	0.120	MM-2017	104
2854	3.6	240	Yes	24, 12	150mA	Centre Tapped	12	Fly Leads	Fly Leads	53	41	43	22	36	0.230	MM-2018	104
2851	1.9	240	Yes	12.6, 6.3	150mA	Centre Tapped	8	Fly Leads	Fly Leads	46	32	37	16	32	0.112	MM-2006	105
2855	4.5	240	Yes	30, 15	150mA	Centre Tapped	8	Fly Leads	Fly Leads	53	44	43	28	36	0.280	MM-2007	105
2853	7	240	Yes	12.6, 6.3	500mA	Centre Tapped	10	Fly Leads	Fly Leads	61	38	51	20	43	0.310	MM-2013	105
2155	15	240	Yes	15, 12.6, 9.5, 8.5, 7.5, 6.3	1A	Multi-Tapped	10	Fly Leads	Solder Lugs	72	52	59	32	51	0.665	MM-2002	105
6672	30	240	Yes	30, 27.5, 24, 20, 17.5, 15	1A	Multi-Tapped	11	Fly Leads	Solder Lugs	85	62	69	35	59	0.924	MM-2008	105
2165	60	240	Yes	30, 24, 21, 18, 15, 12, 9	2A	Multi-Tapped	8	Fly Leads	Solder Lugs	85	65	69	35	59	0.995	MM-2005	105
2154	18	240	Yes	18, 15, 12	1A	Multi-Tapped	8	Fly Leads	Solder Lugs	72	56	59	32	51	0.650	MM-2011	106
2167L	60	240	Yes	12, 9 (x2)	2.5A (x2)	Multi-Tapped/Dual	10	Fly Leads	Solder Lugs	82	76	69	48	59	1.30	MM-2014	106
2156	30	240	Yes	15, 12, 9, 6	2A	Multi-Tapped	10	Fly Leads	Solder Lugs	82	60	69	35	59	0.92	MM-2004	106
2158	72	240	Yes	24	3A	Single	9	Fly Leads	Fly Leads	82	76	69	48	59	1.30	MM-2012	106
2170	100	240	Yes	15, 12 (x2)	3A (x2)	Multi-Tapped/Dual	7	Fly Leads	Solder Lugs	91	76	80	44	68	1.60	MM-2015	106

Note: All EI Core Transformer Fly Leads 200mm

POWER PCB MOUNT

VA	Primary		Secondary			Regulation (%)	PCB Layout		Dimensions (mm)			Weight (kg)	Cat No.	Page No.
	Voltage (V)	Internal Thermal Fuse	Voltage (V)	Current (mA, A)	Winding		Pin Config.	Pin Spacing (mm)	L	W	H			
10	240	Yes	12 (x2)	420mA (x2)	Dual	11	2 x 6	5 x 27.5	37	48	41	0.254	MF-1212	107

POWER TOROIDALS

VA	Primary		Secondary			Regulation (%)	Connection		Dimensions (mm)			Weight (kg)	Cat No.	Page No.
	Voltage (V)	Internal Thermal Fuse	Voltage (V)	Current (mA, A)	Winding		Primary	Secondary	OD	ID	H			
20	240	Yes	9 (x2)	1.11A (x2)	Dual	14	Fly Leads	Fly Leads	75	27	32	0.51	MT-2082	107
20	240	Yes	12 (x2)	0.83A (x2)	Dual	14	Fly Leads	Fly Leads	75	27	32	0.51	MT-2084	107
20	240	Yes	15 (x2)	0.66A (x2)	Dual	15	Fly Leads	Fly Leads	75	27	32	0.51	MT-2086	107
160	240	Yes	12 (x2)	6.66A (x2)	Dual	10	Fly Leads	Fly Leads	110	34	44	1.80	MT-2112	107
160	240	Yes	25 (x2)	3.2A (x2)	Dual	9	Fly Leads	Fly Leads	110	34	44	1.80	MT-2114	107

Note 1: All Toroidal Transformer Fly Leads 150mm.

Note 2: The secondary windings can be connected in parallel to obtain twice the output current. The windings must be connected in phase.

A NOTE REGARDING POWER TRANSFORMERS

In the early days of electricity (mid-late nineteenth century) when Thomas Edison was credited with the invention of the light bulb, he felt that DC (direct current) was the way to go to distribute power around the country. An employee, Nikola Tesla, however, disagreed. He realised, for good technical reasons that AC was technically superior. One of the main reasons for this, is that you cannot use a transformer to convert one DC voltage to another. This is easily done, of course, with a transformer for AC.

The transformer has now been with us for almost 150 years and is one of the most useful electrical components ever invented. Thank you Mr. Telsa for prevailing.

Jaycar proudly carries an extensive range of these humble but essential products.

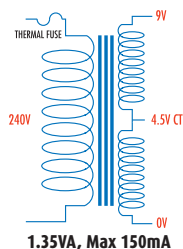
TRANSFORMERS

9V, 1.35VA, 150mA CENTRE TAPPED

TYPE 2840

Specifications			
Type	2840	Temp rise above ambient at rated power	60°C
Secondary winding (s)	Centre Tapped	Regulation	9%
Primary voltage	240VAC	Weight	120g
Total VA rating	1.35VA	Primary connection	200mm Fly leads
Secondary voltages	9V, 4.5V (CT)	Secondary connection	200mm Fly leads
Secondary current (max)	150mA	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	30mA	Dimensions (mm)	A45 D32 L37 W16 H32

SOANAR



1.35VA, Max 150mA

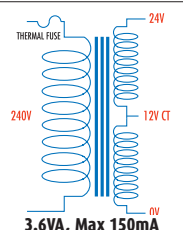


↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2017	\$7.95	\$6.95	\$6.25

24V, 3.6VA, 150mA CENTRE TAPPED

TYPE 2854

Specifications			
Type	2854	Temp rise above ambient at rated power	65°C
Secondary winding (s)	Centre Tapped	Regulation	12%
Primary voltage	240VAC	Weight	230g
Total VA rating	3.6VA	Primary connection	200mm Fly leads
Secondary voltages	24V, 12V (CT)	Secondary connection	200mm Fly leads
Secondary current (max)	150mA	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	40mA	Dimensions (mm)	A53 D41 L43 W22 H36



3.6VA, Max 150mA



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2018	\$8.95	\$7.95	\$6.95

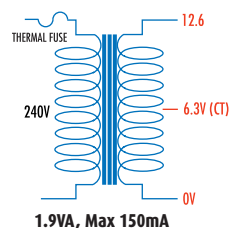
TRANSFORMERS

TRANSFORMERS (CONTINUED)

12.6V CT, 1.9VA, 150MA CENTRE TAPPED

TYPE 2851

Specifications			
Type	2851	Temp rise above ambient at rated power	40°C
Secondary winding (s)	Centre Tapped	Regulation	8%
Primary voltage	240VAC	Weight	112g
Total VA rating	1.9VA	Primary connection	200mm Fly leads
Secondary voltages	12.6V, 6.3V(CT)	Secondary connection	200mm Fly leads
Secondary current (max)	150mA	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	15mA	Dimensions (mm)	A46 D32 L37 W16 H32

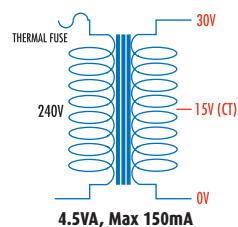


↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2006	\$7.95	\$6.95	\$6.25

30V CT, 4.5VA, 150MA CENTRE TAPPED

TYPE 2855

Specifications			
Type	2855	Temp rise above ambient at rated power	40°C
Secondary winding (s)	Centre Tapped	Regulation	8%
Primary voltage	240VAC	Weight	280g
Total VA rating	4.5VA	Primary connection	200mm Fly leads
Secondary voltages	30V, 15V(CT)	Secondary connection	200mm Fly leads
Secondary current (max)	150mA	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	40mA	Dimensions (mm)	A53 D44 L43 W28 H36

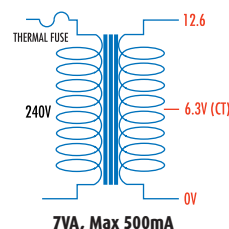


↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2007	\$8.95	\$7.95	\$6.95

12.6V CT, 7VA, 500MA CENTRE TAPPED

TYPE 2853

Specifications			
Type	2853	Temp rise above ambient at rated power	40°C
Secondary winding (s)	Centre Tapped	Regulation	10%
Primary voltage	240VAC	Weight	310g
Total VA rating	7VA	Primary connection	200mm Fly leads
Secondary voltages	12.6V, 6.3V(CT)	Secondary connection	200mm Fly leads
Secondary current (max)	500mA	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	40mA	Dimensions (mm)	A61 D38 L51 W20 H43

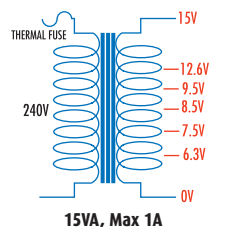


↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2013	\$9.95	\$8.75	\$7.75

6.3 - 15V, 15VA, 1A MULTI-TAPPED

TYPE 2155

Specifications			
Type	2155	Temp rise above ambient at rated power	45°C
Secondary winding (s)	Multi-Tapped	Regulation	10%
Primary voltage	240VAC	Weight	665g
Total VA rating	15VA	Primary connection	200mm Fly leads
Secondary voltages	15V, 12.6V, 9.5V, 8.5V, 7.5V(CT), 6.3V(CT)	Secondary connection	Solder lugs
Secondary current (max)	1A	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	30mA	Dimensions (mm)	A72 D52 L59 W32 H51

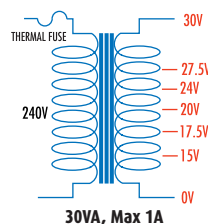


↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2002	\$11.95	\$10.70	\$9.50

15 - 30V, 30VA, 1A MULTI-TAPPED

TYPE 6672

Specifications			
Type	6672	Temp rise above ambient at rated power	60°C
Secondary winding (s)	Multi-Tapped	Regulation	11%
Primary voltage	240VAC	Weight	924g
Total VA rating	30VA	Primary connection	200mm Fly leads
Secondary voltages	30V, 27.5V, 24V, 20V, 17.5V, 15V(CT)	Secondary connection	Solder lugs
Secondary current (max)	1A	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	40mA	Dimensions (mm)	A85 D62 L69 W35 H59

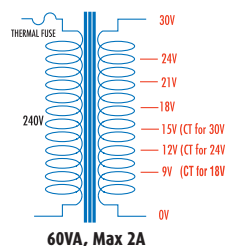


↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2008	\$18.95	\$16.95	\$14.95

9 - 30V, 60VA, 2A MULTI-TAPPED

TYPE 2165

Specifications			
Type	2165	Temp rise above ambient at rated power	60°C
Secondary winding (s)	Multi-Tapped	Regulation	8%
Primary voltage	240VAC	Weight	955g
Total VA rating	60VA	Primary connection	200mm Fly leads
Secondary voltages	30V, 24V, 21V, 18V, 15V(CT), 12V(CT), 9V(CT)	Secondary connection	Solder lugs
Secondary current (max)	2A	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	60mA	Dimensions (mm)	A85 D65 L69 W35 H59



NOTE: Made from special high grade silicon steel for compact dimensions

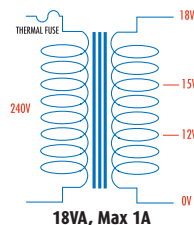
↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2005	\$27.95	\$24.95	\$22.35

TRANSFORMERS

TRANSFORMERS (CONTINUED)

12V - 18V, 18VA, 1A MULTI-TAPPED TYPE 2154

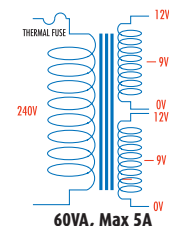
Specifications			
Type	2154	Temp rise above ambient at rated power	60°C
Secondary winding (s)	Multi-Tapped	Regulation	8%
Primary voltage	240VAC	Weight	650g
Total VA rating	18VA	Primary connection	200mm Fly leads
Secondary voltages	18V, 15V, 12V	Secondary connection	Solder lugs
Secondary current (max)	1A	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	40mA	Dimensions (mm)	A72 D56 L59 W32 H51



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2011	\$11.95	\$10.70	\$9.50

9V - 24V, 60VA, 5A MULTI-TAPPED/DUAL TYPE 2167L

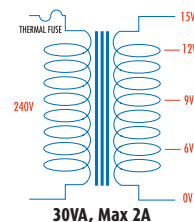
Specifications			
Type	2167L	Temp rise above ambient at rated power	65°C
Secondary winding (s)	Multi-Tapped/dual	Regulation	10%
Primary voltage	240VAC	Weight	1300g
Total VA rating	60VA	Primary connection	200mm Fly leads
Secondary voltages	12V, 9V (x2)	Secondary connection	Solder lugs
Secondary current (max)	2.5A (x2)	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	65mA	Dimensions (mm)	A82 D76 L69 W48 H59



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2014	\$27.95	\$24.95	\$22.35

6 - 15V, 30VA, 2A MULTI-TAPPED TYPE 2156

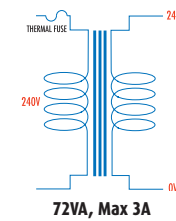
Specifications			
Type	2156	Temp rise above ambient at rated power	60°C
Secondary winding (s)	Multi-Tapped	Regulation	10%
Primary voltage	240VAC	Weight	920g
Total VA rating	30VA	Primary connection	200mm Fly leads
Secondary voltages	15V, 12V, 9V, 6V(CT)	Secondary connection	Solder lugs
Secondary current (max)	2A	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	60mA	Dimensions (mm)	A82 D60 L69 W35 H59



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2004	\$18.95	\$16.95	\$14.95

24V, 72VA, 3A SINGLE WINDING TYPE 2158

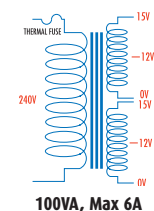
Specifications			
Type	2158	Temp rise above ambient at rated power	65°C
Secondary winding (s)	Single	Regulation	10%
Primary voltage	240VAC	Weight	1300g
Total VA rating	72VA	Primary connection	200mm Fly leads
Secondary voltages	24V	Secondary connection	200mm Fly leads
Secondary current (max)	3A	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	60mA	Dimensions (mm)	A82 D76 L69 W48 H59



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2012	\$27.95	\$24.95	\$22.35

12V - 30V, 100VA, 6A MULTI-TAPPED/DUAL TYPE 2170

Specifications			
Type	2170	Temp rise above ambient at rated power	70°C
Secondary winding (s)	Multi-Tapped/dual	Regulation	7%
Primary voltage	240VAC	Weight	1600g
Total VA rating	100VA	Primary connection	200mm Fly leads
Secondary voltages	15V, 12V(x2)	Secondary connection	Solder lugs
Secondary current (max)	3A (x2)	Conforms to AS/NZ 61558.2.6	Yes
Magnetising current	80mA	Dimensions (mm)	A91 D76 L80 W44 H68



100VA, max 6A when connected in parallel.



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2015	\$29.95	\$26.90	\$23.70

LET'S FIND EVERYTHING YOU NEED!

BUILD YOUR OWN COILS AND TRANSFORMERS BOOK

This book is a wealth of information, ideal for hobbyist or anybody interested in winding their own transformers. After the introduction the book covers attributes of coils/transformers, mutual inductance, reactance, resonance, impedance, coil selectivity. It then goes on to the design aspects - discussing coils in tuning circuits, types of formers and cores, types of winding, self capacity, equations, coil design, design of IF transformers then output and power transformers.

- 55 pages 137 x 212 mm.



↑	Cat.	Qty 1+
	BM-2440	\$7.50

PRESSBOARD INSULATION MATERIAL

Similar to Presspahn Elephantide®, this product is a heavily pressed craft-type board which is used as an insulator in mains products. It can be scored, folded and formed into many shapes, particularly into boxes or partitions to isolate mains circuits from fingers. It has good abrasion resistance and is often used in areas where chafing from vibration can occur.

- Thermal Rating: 150°C
- Dielectric Strength: 12kV/mm.
- Sheet thickness: 0.8mm
- Sheet dimensions: 225(H) x 208(W)mm.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HG-9985	\$4.95	\$4.45	\$3.90

TRANSFORMERS

TRANSFORMERS (CONTINUED)

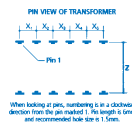
10VA PCB MOUNT POWER TRANSFORMERS

These quality transformers are manufactured to AS3108. They have split bobbin construction and 2 entirely separate secondaries. Each unit is protected by a 126°C 250V 2A rated thermal fuse in the primary winding.

Specifications:	
Input	240V AC 50Hz
Output secondaries may be connected in series or parallel	MF-1212 only
Cat. MF-1202	5V@1A, 12V@400mA (2 windings)
Cat. MF-1212	12+12V @420mA
Dimensions	36(H) x 48(W) x 40(D) mm
Weight	254 grams

PIN SPACING mm	X1	X2	X3	X4	Z
10VA & 12VA	5	5	5	5	27.5

Pin connection diagram



	Cat.	Qty 1+	Qty 2+	Qty 4+
5V + 12V	MF-1202	\$15.95	\$14.35	\$12.70
12V + 12V	MF-1212	\$18.95	\$16.95	\$14.95

TOROIDALS

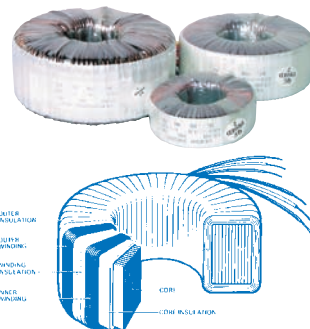
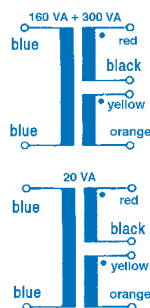
WHY A TOROID?

- Smaller size and weight to meet modern 'slimline' requirements
- Low electrically induced noise demanded by compact equipment
- High efficiency enabling conservative rating whilst maintaining size advantages
- Simple, quick, single bolt mounting

The Toroidal transformer is now accepted as the standard in the industry, quality made to ISO 9000 overtaking the obsolete laminated type. Industry has been quick to recognise the advantage toroidals offer in size, weight and lower radiated field.

Current ratings on toroidal transformers. Can be used in 2 ways:-
A) both secondary windings in series - double the volts
B) both secondary windings in parallel - double the amps.

Note: If connected in parallel, the windings must be connected in phase.



20VA LOW PROFILE • Dimensions: O/D 75, I/D 27 x 32mm
The height is only 32mm, which means they will fit into a 44mm rack case.

Cat.		Secondary Series	Secondary Parallel
MT-2082	9+9V	1.11A	2.22A
MT-2084	12+12V	0.833A	1.66A
MT-2086	15+15V	0.666A	1.333A

			Qty 1+	Qty 2+	Qty 4+
9V 20VA	MT-2082		\$24.95	\$22.35	\$19.70
12V 20VA	MT-2084		\$23.95	\$21.35	\$18.95
15V 20VA	MT-2086		\$23.95	\$21.35	\$18.95

160VA TOROIDS • Dimensions: 110 O/D x 34 I/D x 44(H)mm

Cat.		Secondary Series	Secondary Parallel
MT-2112	12+12V	6.66A	13.33A
MT-2114	25+25V	3.2A	6.4A

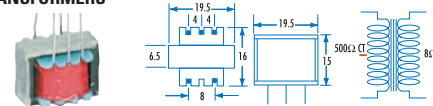
			Qty 1+	Qty 2+	Qty 4+
12V 160VA	MT-2112		\$54.95	\$49.45	\$43.90
25V 160VA	MT-2114		\$54.95	\$49.45	\$43.90

MINIATURE TRANSFORMERS

MINIATURE TRANSFORMERS

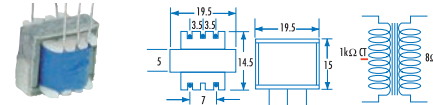
MINIATURE OUTPUT TRANSFORMERS

- Primary/secondary 500 ohms ct/8 ohms
- Iron core
- 450mW rating.



STANDARD

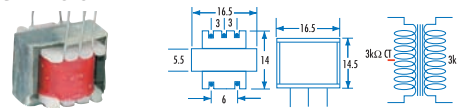
- Primary/secondary 1k ohm ct/8 ohms
- 350mW rating.



	Cat.	Qty 1+	Qty 2+	Qty 4+
Miniature	MM-2530	\$5.95	\$5.25	\$4.75
Standard	MM-2532	\$4.95	\$4.45	\$3.90

MINIATURE COUPLING TRANSFORMER

- 3k ohm CT/3k
- Iron core.



	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-2534	\$4.95	\$4.45	\$3.90

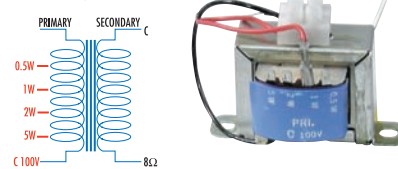
SPEAKER TRANSFORMER

5W LINE SPEAKER TRANSFORMER

Designed to tap 100V (or 70V 1/2 power) public address amplifier lines to use an 8Ω speaker. Made with grain oriented steel for good frequency response. Good dynamic range. Primary taps enable you to select power level for 8Ω speaker. Connect primary to C (100V) and tap for whatever sound level is required from 0.5-5WRMS.

Supplied with terminal block mounted on top of transformer.
Mounting hole centres 53mm

Primary	Power
20k	0.5W
10k	1W
5k	2W
2.5k	5W



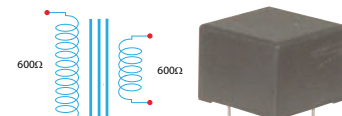
	Cat.	Qty 1+	Qty 2+	Qty 4+
	MM-1900	\$10.95	\$9.75	\$8.75

ISOLATION TRANSFORMER

600/600 OHM ISOLATION TRANSFORMER

This epoxy encapsulated isolation transformer is designed for connecting electronic equipment to the telephone system. It is a very small size which makes it ideal for use on PCBs in confined spaces.

- Measures just 18(L) x 14(H) x 18(W)mm
- PCB hole size: 0.7mm
- Approval number: A94 4/LTD/181



	Cat.	Qty 1+	Qty 2+	Qty 4+
	MA-1512	\$19.95	\$17.70	\$15.70

STROBE TRANSFORMER & TUBE

MINIATURE STROBE TRIGGER TRANSFORMER

Used to trigger small XENON discharge lamps.

- Dimensions: 10(L) x 7(Ø)mm



	Cat.	Qty 1+	Qty 10+	Qty 25+
	MM-2520	\$1.95	\$1.75	\$1.55

LET'S FIND EVERYTHING YOU NEED!

FROM
\$59.95
TS-1620



SOLDERING STATIONS

P170

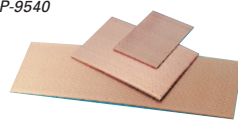
FROM
\$5.95
QM-1502



TEST EQUIPMENT

P148

FROM
\$4.50
HP-9540



PROTOTYPING BOARDS

P27

FROM
\$11.95
TH-1897



TOOLS

P131

VENTILATION FANS

MECHANICAL VENTILATION (FANS)



Suitable for computers, office machinery, appliances, copying machines, power units, amplifiers, automatic vending machines, air conditioning, medical equipment etc.

- Long life - 60,000 hours at 25°C, 30,000 hours at 40°C
- Ball bearing: 100,000 hrs @ 25°C
- Operating temperature -20°C to +70°C
- Can be mounted on suction or discharge side
- Wiring will not burn out even if rotating parts are restricted



ON ALL OF OUR FANS

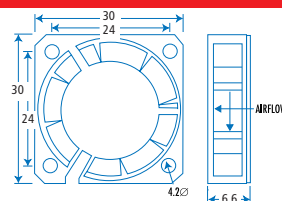
Size mm	Depth mm	Operating Volt	Bearing Type	Air Volume (CFM)	Speed (RPM)	Connection	Housing	Tacho	Cat	Page
5VDC AXIAL FAN										
30	6	5VDC	Ball	3.1	8,000	Flylead	Plastic	No	YX-2500	108
12VDC AXIAL FANS										
30	6	12VDC	Ball	3.1	8,000	Flylead	Plastic	No	YX-2501	108
40	10	12VDC	Sleeve	5.4	6,000	Flylead	Plastic	No	YX-2503	108
40	20	12VDC	Sleeve	7.6	7,000	Flylead	Plastic	No	YX-2502	108
40	10	12VDC	Ball	5.4	6,000	Flylead & Plug	Plastic	Yes	XC-5054	109
50	15	12VDC	Sleeve	16.6	5,500	Flylead	Plastic	No	YX-2504	109
50	10	12VDC	Ball	11.6	5,500	Flylead & Plug	Plastic	Yes	XC-5055	109
60	25.4	12VDC	Sleeve	20	4,000	Flylead	Plastic	No	YX-2505	109
80	25.4	12VDC	Sleeve	34	3,000	Flylead	Plastic	No	YX-2512	109
80	25.4	12VDC	Ball	34	3,000	Flylead	Plastic	No	YX-2513	109
80	20	12VDC	Ball	42	3,100	Flylead	Plastic	No	YX-2523	110
80	25	12VDC	Magnetic	28.1	2,000	Flylead	Polycarbonate	No	YX-2580 *	112
80	25	12VDC	Ball	20.7	1,600	3 Pin Molex	Polycarbonate	No	YX-2570 *	112
90	25	12VDC	Sleeve	59	3,000	Flylead	Plastic	No	YX-2521	110
92	25	12VDC	Magnetic	39.8	2,000	Flylead	Polycarbonate	No	YX-2582 *	112
92	25	12VDC	Ball	31.3	1,500	3 Pin Molex	Polycarbonate	No	YX-2572 *	112
120	25.4	12VDC	Ball	88	3,000	Flylead	Plastic	No	YX-2518	110
120	25	12VDC	Ball	88	3,000	Flylead	Plastic	No	YX-2522	110
120	25	12VDC	Magnetic	64.3	1,500	Flylead	Polycarbonate	No	YX-2584 *	112
120	25	12VDC	Ball	37	1,000	3 Pin Molex	Polycarbonate	No	YX-2574 *	112
12VDC BLOWER FANS										
97 x 94	33	12VDC	Ball	26	3,600	Flylead	Plastic	No	YX-2532	110
24VDC AXIAL FAN										
80	25.4	24VDC	Ball	40	3,200	Flylead	Plastic	No	YX-2542	110
240VAC AXIAL FANS										
80	25.4	240VAC	Sleeve	23	2,800	Flylead	Metal	No	YX-2509	111
80	38	240VAC	Sleeve	30	2,800	Flylead	Metal	No	YX-2510	111
80	38	240VAC	Ball	30	2,800	Flylead	Metal	No	YX-2508	111
120	25.4	240VAC	Sleeve	80	2,350	Solder	Metal	No	YX-2516	111
120	38	240VAC	Sleeve	105	3,000	Solder	Metal	No	YX-2514	111
120	38	240VAC	Ball	105	3,000	Solder	Metal	No	YX-2517	111
150	55	240VAC	Ball	230	3,400	Use PS-4160	Metal	No	YX-2520	111

Note: Fans with * on page 112 are not Sirocco brand and have specific technical data. Please refer to that page.

** YX-2500 IS RATED 5VDC

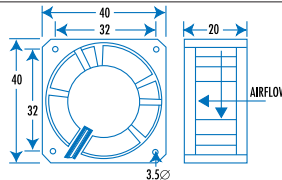
12VDC FANS

30MM THIN - 2 WIRE



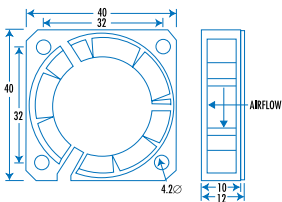
		Cat	Qty 1+	Qty 4+	Qty 10+
5VDC	30 x 30mm	YX-2500**	\$13.95	\$12.35	\$10.95
12VDC	30 x 30mm	YX-2501	\$13.95	\$12.35	\$10.95

40MM - 2 WIRE



		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	40mm	YX-2502	\$19.95	\$17.70	\$15.70

40MM THIN - 2 WIRE



		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	40mm	YX-2503	\$16.95	\$14.95	\$13.35

Specifications	YX-2500	YX-2501
Voltage (V)	5VDC	12VDC
Current (mA)	200	120
Dimensions (mm)	30 x 30 x 6	
Air Volume (m³/min)	3.1	
Air Volume (CFM)	108	
Speed (RPM)	8,000	
Noise (dBA)	27	
Bearing System	Ball	
Housing	Plastic, GRP filled	
Impeller	Plastic, GRP filled	
Connections	Flylead	

Specifications	YX-2502
Voltage (V)	12VDC
Current (mA)	100
Dimensions (mm)	40 x 40 x 20
Air volume (m³/min)	0.215
Air volume (CFM)	7.6
Speed (RPM)	7000
Noise (dBA)	32
Bearing	Sleeve
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead

Specifications	YX-2503
Voltage (V)	12VDC
Current (mA)	80
Dimensions (mm)	40 x 40 x 10
Air volume (m³/min)	0.16
Air volume (CFM)	5.4
Speed (RPM)	6000
Noise (dBA)	30
Bearing	Sleeve
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead



TECH TALK!

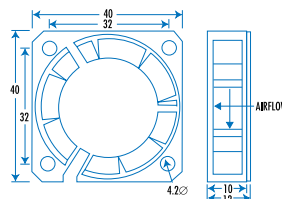
All 240V rated fans work equally well on 230V mains

VENTILATION FANS

12VDC FANS (CONTINUED)

40MM BALL BEARING - 3 WIRE

The third wire provides a pulse output - 1 pulse per revolution.

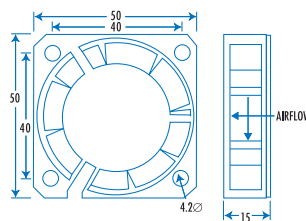


↑	12VDC	40mm	Cat	Qty 1+	Qty 4+	Qty 10+
			XC-5054	\$15.90	\$13.95	\$12.70

Specifications	XC-5054
Voltage (V)	12VDC
Current (mA)	80
Dimensions (mm)	40 x 40 x 10
Air volume (m³/min)	0.16
Air volume (CFM)	5.4
Speed (RPM)	6000
Noise (dBA)	30
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead

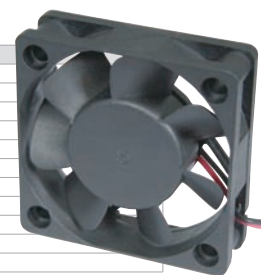


50MM THIN - 2 WIRE



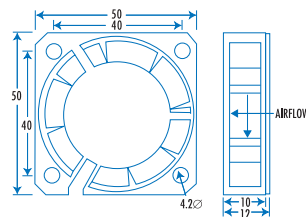
↑	12VDC	50mm	Cat	Qty 1+	Qty 4+	Qty 10+
			YX-2504	\$17.95	\$15.95	\$14.35

Specifications	YX-2504
Voltage (V)	12VDC
Current (mA)	190
Dimensions (mm)	50 x 50 x 15
Air volume (m³/min)	0.7
Air volume (CFM)	0.16
Speed (RPM)	5500
Noise (dBA)	33
Bearing	Sleeve
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead



50MM BALL BEARING - 3 WIRE

The third wire provides a pulse output - 1 pulse per revolution.

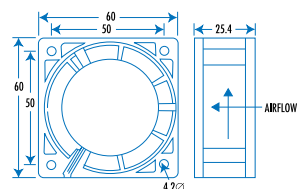


↑	12VDC	50mm	Cat	Qty 1+	Qty 4+	Qty 10+
			XC-5055	\$15.90	\$13.95	\$12.70

Specifications	XC-5055
Voltage (V)	12VDC
Current (mA)	130
Dimensions (mm)	50 x 50 x 10
Air volume (m³/min)	0.33
Air volume (CFM)	11.6
Speed (RPM)	5500
Noise (dBA)	31
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead

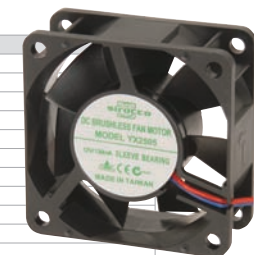


60MM - 2 WIRE

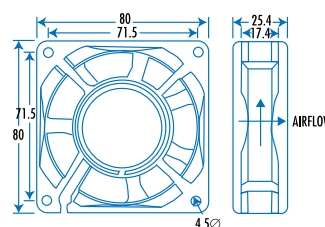


↑	12VDC	60mm	Cat	Qty 1+	Qty 4+	Qty 10+
			YX-2505	\$17.95	\$15.95	\$14.35

Specifications	YX-2505
Voltage (V)	12VDC
Current (mA)	130
Dimensions (mm)	60 x 60 x 25.4
Air volume (m³/min)	0.57
Air volume (CFM)	20
Speed (RPM)	4000
Noise (dBA)	30
Bearing	Sleeve
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead



80MM - 2 WIRE



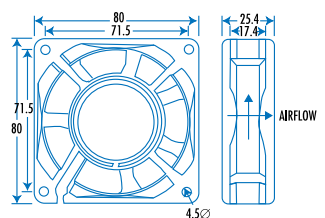
↑	12VDC	80mm	Cat	Qty 1+	Qty 4+	Qty 10+
			YX-2512	\$17.95	\$15.95	\$14.35

Specifications	YX-2512
Voltage (V)	12VDC
Current (mA)	200
Dimensions (mm)	80 x 80 x 25.4
Air volume (m³/min)	0.97
Air volume (CFM)	34
Speed (RPM)	3000
Noise (dBA)	32
Bearing	Sleeve
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead



80MM BALL BEARING - 2 WIRE

• Life 100,000 hours at 25 °C



↑	12VDC	80mm	Cat	Qty 1+	Qty 4+	Qty 10+
			YX-2513	\$19.95	\$17.70	\$15.70

Specifications	YX-2513
Voltage (V)	12VDC
Current (mA)	200
Dimensions (mm)	80 x 80 x 25.4
Air volume (m³/min)	0.97
Air volume (CFM)	34
Speed (RPM)	3000
Noise (dBA)	32
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead

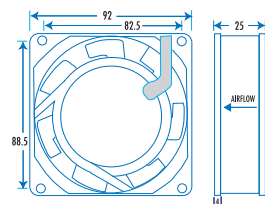


ELECTROMECHANICAL & ENCLOSURES

VENTILATION FANS

12VDC FANS (CONTINUED)

90MM - 2 WIRE FAN

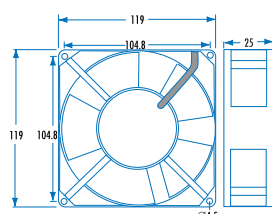


		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	90mm	YX-2521	\$19.95	\$17.70	\$15.70

Specifications	YX-2521
Voltage (V)	12VDC
Current (mA)	320
Dimensions (mm)	90 x 90 x 25
Air volume (m³/min)	1.67
Air volume (CFM)	59
Speed (RPM)	3000
Noise (dBA)	36
Bearing	Sleeve
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead

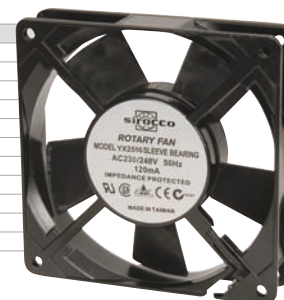


120MM THIN BALL BEARING - 2 WIRE



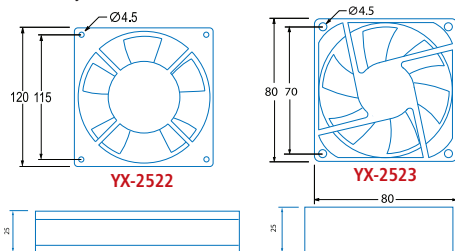
		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	120mm	YX-2518	\$28.95	\$25.95	\$22.95

Specifications	YX-2518
Voltage (V)	12VDC
Current (mA)	360
Dimensions (mm)	120 x 120 x 25.4
Air volume (m³/min)	2.3
Air volume (CFM)	80
Speed (RPM)	3000
Noise (dBA)	42
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead



80 & 120MM BALL BEARING - IP55

IP55 rating on a fan which is extremely important, particularly when the fan is located in an environment where dust particles, soot etc can quickly clog up a standard fan and bring it to failure early in life.



	Diameter	Cat.	Qty 1+	Qty 4+	Qty 10+
12VDC	80mm	YX-2523	\$24.95	\$22.35	\$19.70
12VDC	120mm	YX-2522	\$36.95	\$33.45	\$29.45

Specifications	YX-2522	YX-2523
Voltage (V)	12VDC	12VDC
Current (mA)	380	200
Dimensions (mm)	120 x 120 x 25	80 x 80 x 25
Air volume (m³/min)	3	1.2
Air volume (CFM)	106	42
Speed (RPM)	3000	3100
Noise (dBA)	45	32
Bearing		Ball
Housing		Plastic, fibreglass filled
Impeller		Plastic, fibreglass filled
Connections		Flylead
Other		IP55



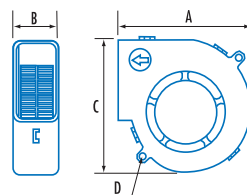
BLOWER FAN - 12VDC

97MM X 94MM BLOWER FAN BALL BEARING - 2 WIRE

Ideal for applications where space is limited but high air volume is required.



A=97mm
B=33mm
C=94mm



		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	97 x 94mm	YX-2532	\$29.95	\$26.90	\$23.70

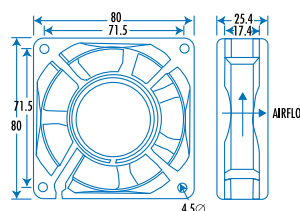
Specifications	YX-2532
Voltage (V)	12VDC
Current (mA)	860
Dimensions (mm)	97 x 94 x 33
Air volume (m³/min)	0.74
Air volume (CFM)	26
Speed (RPM)	3600
Noise (dBA)	51
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead



24VDC FANS

80MM 24VDC THIN BALL BEARING VERSION - 2 WIRE

Life expectancy 100,000 hours @ 25°C.



		Cat	Qty 1+	Qty 4+	Qty 10+
24VDC	80mm	YX-2542	\$29.95	\$26.90	\$23.70

Specifications	YX-2542
Voltage (V)	24VDC
Current (mA)	130
Dimensions (mm)	80 x 80 x 25.4
Air volume (m³/min)	1.1
Air volume (CFM)	40
Speed (RPM)	3200
Noise (dBA)	35
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead



VENTILATION FANS

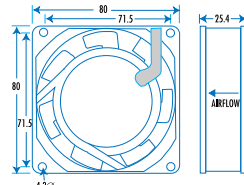
240VAC FANS

80MM THIN 2 WIRE



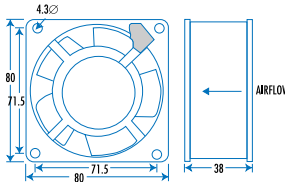
TECH TALK!

All 240V rated fans work equally well on 230V mains



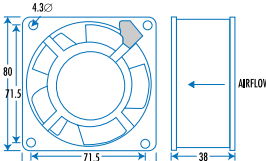
		Cat	Qty 1+	Qty 4+	Qty 10+
240VAC	80mm	YX-2509	\$29.95	\$26.90	\$23.70

80MM STANDARD - 2 WIRE



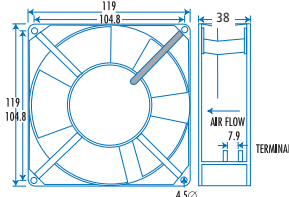
		Cat	Qty 1+	Qty 4+	Qty 10+
240VAC	80mm	YX-2510	\$29.95	\$26.90	\$23.70

80MM BALL BEARING - 2 WIRE



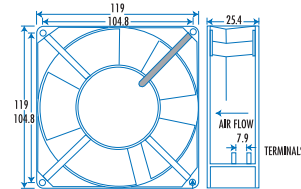
		Cat	Qty 1+	Qty 4+	Qty 10+
240VAC	80mm	YX-2508	\$36.95	\$33.45	\$29.45

120MM - SOLDER LUGS



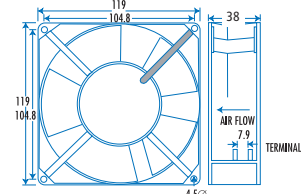
		Cat	Qty 1+	Qty 4+	Qty 10+
240VAC	120mm	YX-2514	\$28.95	\$25.95	\$22.95

120MM THIN - SOLDER LUGS



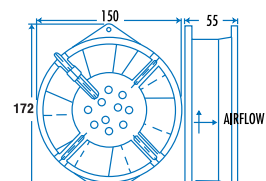
		Cat	Qty 1+	Qty 4+	Qty 10+
240VAC	120mm	YX-2516	\$29.95	\$26.90	\$23.70

120MM BALL BEARING - SOLDER LUGS



		Cat	Qty 1+	Qty 4+	Qty 10+
240VAC	120mm	YX-2517	\$36.95	\$33.45	\$29.45

150MM BALL BEARING - 2 WIRE



		Cat	Qty 1+	Qty 4+	Qty 10+
240VAC	150mm	YX-2520	\$84.95	\$76.50	\$67.95

Specifications	YX-2509
Voltage (V)	240VAC
Current (mA)	120
Dimensions (mm)	80 x 80 x 25.4
Air volume (m³/min)	0.67
Air volume (CFM)	23
Speed (RPM)	2800
Noise (dBA)	33
Bearing	Sleeve
Housing - Diecast	Diecast zinc, aluminium
Impeller	Plastic, fibreglass filled
Connections	Flylead



Specifications	YX-2510
Voltage (V)	240VAC
Current (mA)	80
Dimensions (mm)	80 x 80 x 38
Air volume (m³/min)	0.88
Air volume (CFM)	30
Speed (RPM)	2800
Noise (dBA)	35
Bearing	Sleeve
Housing - Diecast	Aluminium, powdercoated
Impeller	Plastic, fibreglass filled
Connections	Flylead



Specifications	YX-2508
Voltage (V)	240VAC
Current (mA)	100
Dimensions (mm)	80 x 80 x 38
Air volume (m³/min)	0.88
Air volume (CFM)	30
Speed (RPM)	2800
Noise (dBA)	32
Bearing	Ball
Housing - Diecast	Aluminium, powdercoated
Impeller	Plastic, fibreglass filled
Connections	Flylead
Other	Life - 100,000 hrs@25°C



Specifications	YX-2514
Voltage (V)	240VAC
Current (mA)	125
Dimensions (mm)	120 x 120 x 38
Air volume (m³/min)	3
Air volume (CFM)	105
Speed (RPM)	3000
Noise (dBA)	47
Bearing	Sleeve
Housing - Diecast	Aluminium
Impeller	Plastic, fibreglass filled
Connections	Solder lugs
Other	-



Specifications	YX-2516
Voltage (V)	240VAC
Current (mA)	120
Dimensions (mm)	120 x 120 x 25.4
Air volume (m³/min)	2.3
Air volume (CFM)	80
Speed (RPM)	2350
Noise (dBA)	44
Bearing	Sleeve
Housing - Diecast	Aluminium
Impeller	Plastic, fibreglass filled
Connections	Solder lugs
Other	-



Specifications	YX-2517
Voltage (V)	240VAC
Current (mA)	125
Dimensions (mm)	120 x 120 x 38
Air volume (m³/min)	3
Air volume (CFM)	105
Speed (RPM)	3000
Noise (dBA)	47
Bearing	Ball
Housing - Diecast	Aluminium
Impeller	Plastic, fibreglass filled
Connections	Solder lugs
Other	-



Specifications	YX-2520
Voltage (V)	240VAC
Current (mA)	290
Dimensions (mm)	150 x 172 x 55
Air volume (m³/min)	6.57
Air volume (CFM)	230
Speed (RPM)	3400
Noise (dBA)	53
Bearing	Ball
Housing - Diecast	Aluminium
Impeller	Plastic, fibreglass filled
Connections	Flylead
Other	-



ELECTROMECHANICAL & ENCLOSURES

VENTILATION FANS

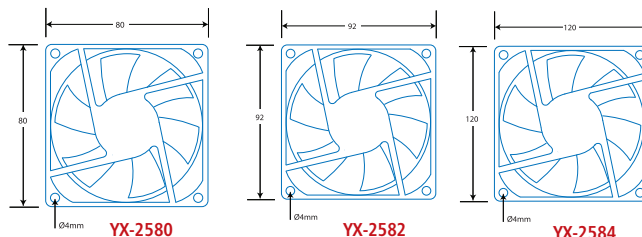
12VDC MAGLEV & HYDRODYNAMIC FANS

SUPER LONG-LIFE LOW-NOISE MAGLEV BEARING CASE FANS

Featuring a patented Nanoflux bearing that incorporates magnetic levitation (maglev) technology and precise manufacturing, these premium quality fans ensure an extremely long operational life of 100,000hrs at 40°C (even longer at 25°C). Not only does the unique self-lubricating maglev bearing design offer extremely long life, but also extremely low noise levels compared to traditional ball bearings, and also offers the ability for the fan impeller to be removed for cleaning. The fan impeller itself has a winglet tip design and is UV reactive. Rubber fan mounts are also included to eliminate fan motor vibrations entering the case, further reducing noise levels. Dust and waterproof to IP54, these fans are sure to last even in harsh conditions.

- Flylead with 3 pin molex connector
- Black: earth, Red: 12V+, Yellow: Tacho output (1 pulse/rev)
- Nanoflux magnetic levitation bearings
- Polycarbonate housing
- UV reactive polycarbonate impellers

Specifications	YX-2580	YX-2582	YX-2584
Voltage (V)	12VDC	12VDC	12VDC
Starting voltage (V)	5VDC	5VDC	5VDC
Current (mA)	100	180	220
Dimensions (mm)	80 x 80 x 25	92 x 92 x 25	120 x 120 x 25
Air volume (m³/min)	0.8	1.13	1.82
Air volume (CFM)	28.1	39.8	64.3
Speed (RPM)	2000	2000	1500
Noise (dBA)	21	22.5	25
Bearings	Nanoflux magnetic levitation	Nanoflux magnetic levitation	Nanoflux magnetic levitation
Housing	Polycarbonate	Polycarbonate	Polycarbonate
Impellers	UV reactive polycarbonate	UV reactive polycarbonate	UV reactive polycarbonate
Connections	Flylead with 3 pin molex	Flylead with 3 pin molex	Flylead with 3 pin molex



YX-2582

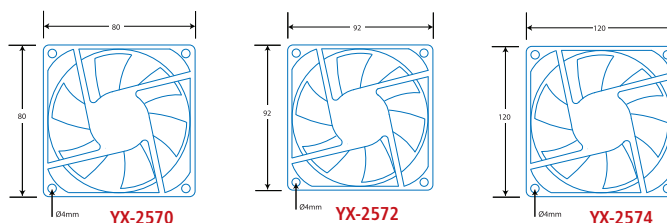


		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	80mm	YX-2580	\$24.95	\$22.35	\$19.70
12VDC	90mm	YX-2582	\$29.95	\$26.90	\$23.70
12VDC	120mm	YX-2584	\$34.95	\$31.45	\$27.90

SILENT HYDRODYNAMIC BEARING CASE FANS

Designed to provide additional airflow without increasing noise levels these fans have precisely balanced blades and long-life hydro-dynamic bearing. Ultra-low noise making these fans perfect for a home theatre PC, or ventilating the amplifier wedged into your entertainment unit. To further improve silence, rubber fan mounts are included to eliminate fan motor vibrations inducing vibration noise.

- Rated to last for 50,000 hours at 40°C (more at 25°C).



YX-2570



Specifications	YX-2570	YX-2572	YX-2574
Voltage (V)	12VDC	12VDC	12VDC
Current (mA)	80	130	80
Dimensions (mm)	80 x 80 x 25	92 x 92 x 25	120 x 120 x 25
Air volume (m³/min)	0.59	0.89	1.05
Air volume (CFM)	20.7	31.3	37
Speed (RPM)	1600	1500	1000
Noise (dBA)	18	20	20.2
Bearings	Ball (hydrodynamic)	Ball (hydrodynamic)	Ball (hydrodynamic)
Housing	Polycarbonate	Polycarbonate	Polycarbonate
Impellers	Polycarbonate	Polycarbonate	Polycarbonate
Connections	Flylead with 3 Pin Molex	Flylead with 3 Pin Molex	Flylead with 3 Pin Molex

		Cat	Qty 1+	Qty 4+	Qty 10+
12VDC	80mm	YX-2570	\$19.95	\$17.70	\$15.70
12VDC	90mm	YX-2572	\$24.95	\$22.35	\$19.70
12VDC	120mm	YX-2574	\$28.95	\$25.95	\$22.95

LET'S FIND EVERYTHING YOU NEED!

FAN POWER LEAD

Use with our 240VAC fans with two lugs for power connection. Moulded plug to suit fan one end, and bare wires at the other.



	Length	Cat	Qty 1+	Qty 4+	Qty 10+
	1.2m	PS-4160	\$3.95	\$3.45	\$3.15

PLASTIC FAN GUARD / FILTER KITS

Foam filter prevents dust particles entering the fan. Rated to UL 94V-0.

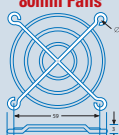
- We recommend periodic cleaning of the foam filter to prevent clogging and restricting air flow.
- Available in 3 sizes.



	Width	Cat	Qty 1+	Qty 4+	Qty 10+
	60mm	YX-2550	\$6.95	\$6.25	\$5.50
	80mm	YX-2552	\$6.95	\$6.25	\$5.50
	120mm	YX-2554	\$7.95	\$6.95	\$6.25

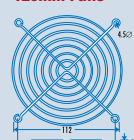
FAN FINGER GUARDS

80mm Fans



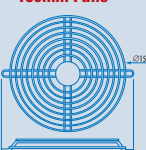
Cat. YX-2511

120mm Fans



Cat. YX-2515

150mm Fans



Cat. YX-2525

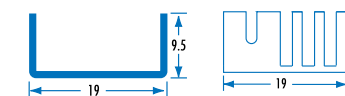
	Width	Cat	Qty 1+	Qty 4+	Qty 10+
	80mm	YX-2511	\$3.95	\$3.45	\$3.15
	120mm	YX-2515	\$4.95	\$4.45	\$3.90
	150mm	YX-2525	\$8.95	\$7.95	\$6.95

HEATSINKS

HEATSINKS & ACCESSORIES

TO-220 MINI (6073B TYPE)

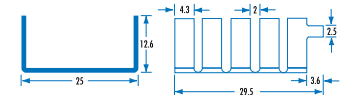
- Equivalent to popular 6073 type.



↑ Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
20°C/W	HH-8502	\$0.85	\$0.75	\$0.65

TO-220 (6021 TYPE)

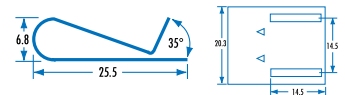
- Solderable PCB mounting pins



↑ Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
12°C/W	HH-8504	\$1.45	\$1.30	\$1.15

TO-220 CLIP-ON (6043 TYPE)

The heatsink will just clip over a device when required for permanent or temporary installation.



↑ Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
30°C/W	HH-8503	\$1.20	\$1.05	\$0.95

TO-220

These PCB mount heatsinks have two 'screw flute' channels to aid in fastening to a board or surface.

- 16(W) x 21.8(D) x 10(H)mm

↑ Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
30°C/W	HH-8514	\$1.75	\$1.55	\$1.40

TO-220

Same dimensions as our HH-8514 only with longer fins. These PCB mount heatsinks have two tinned pins to aid in fastening the sink to a board or surface.

- 16(W) x 21.8(D) x 15.8(H)mm
- Pins 2mm dia. x 3mm long

↑ Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
19°C/W	HH-8516	\$1.55	\$1.35	\$1.20

PC MOUNT TO-3P

Will accept up to TO-3P size flat pack transistors. (This includes TO-220). Includes 2 PC pins, which help stabilise the heatsink and allow you to solder to PCB pads.

25MM HIGH (6098 TYPE)

- Size 33.6(W) x 12(D) x 25(H)mm.
- Cat. HH-8520

40MM HIGH (6099 TYPE)

- Size 33.6(W) x 12(D) x 40(H)mm.
- Cat. HH-8522

↑ Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
17°C/W	HH-8520	\$1.55	\$1.35	\$1.20
11°C/W	HH-8522	\$2.65	\$2.30	\$1.95

HEAVY DUTY TO-3P (ML97 TYPE)

Heavy duty version of the heatsinks described above.

- Solderable screw studs.
- Size 42(W) x 25(D) x 38(H)mm

↑ Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
7.5°C/W	HH-8526	\$2.75	\$2.45	\$2.15

VERSATILE HEAVY DUTY

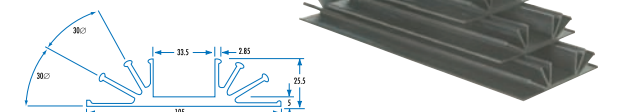
- Allows horizontal & vertical mounting.
- Length 72mm
- Undrilled.



↑ Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
2.2°C/W	HH-8566	\$14.95	\$13.35	\$11.70

HIGH EFFICIENCY FAN TYPE

- Available in various lengths.
- 105mm wide.



↑ Length	Thermal resist.	Cat.	Qty 1+	Qty 4+	Qty 10+
55mm	2.5°C/W	HH-8570	\$5.95	\$5.25	\$4.75
72mm	2.2°C/W	HH-8572	\$8.95	\$7.95	\$6.95
135mm	1.1°C/W	HH-8573	\$11.95	\$10.70	\$9.50

LET'S FIND EVERYTHING YOU NEED!

25% SILVER HEATSINK COMPOUND - 1.5 GRAM TUBE

Contains 25% Silver for more efficient heat transfer. Ready to use syringe. Please note that Silver Heatsink Compound does conduct electricity and care should be taken when being used.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5g Tube	NM-2013	\$5.95	\$5.25	\$4.75

HEATSINK COMPOUND - 3G SYRINGE WITH APPLICATOR

Features Nano Diamond for high thermal conductivity. It is electrically insulated so that you can apply to all electronic components and ICs and protects from short circuits.

- Instant conductivity
- Complete insulation
- Thermal conductivity: >3.8W/m-K
- Thermal resistance: <0.087°C-in 2/W
- Specific resistance: >2.4
- Operating temperature: -50°C-240°C

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
3g Tube	NM-2018	\$7.95	\$7.15	\$6.25

HEATSINK COMPOUND - ADHESIVE

Non electrically conductive. One 5 gram tube will adhere up to 16 TO-3 package transistors.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
5g Tube	NM-2014	\$7.95	\$6.95	\$6.25

HEATSINK COMPOUND

Heat conducting paste facilitates heat transfer from semiconductors to heatsinks. One 10g tube will do up to 30 TO-3 package transistors.

- Non electrically conductive

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
10g Tube	NM-2010	\$3.95	\$3.45	\$3.15
50g Syringe	NM-2011	\$9.95	\$8.75	\$7.75
150g Tube	NM-2012	\$19.95	\$17.70	\$15.70

THERMAL TRANSFER TAPE 100 X 100 X 0.5MM - PKT 2

When it comes to attaching devices like star LED modules to heatsinks, it's often not easy because they don't have screw 'eyes' like a TO220 transistor package. Using this thermal transfer tape, it's a breeze. The material is self adhesive and provides good thermal conductivity making it easy for chipsets, LED modules, memory modules etc. 2pcs of 100mm x 100mm sheets supplied. Just cut to size. 0.5mm thickness.

Specifications	
Thermal Conductivity	1.6 W/m-k
Flammability Level	UL94V-0
Working Temperature Range	-60 ~ +250°C
Insulation Strength	>7,000V/mm

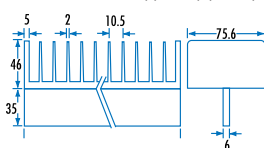
↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2790	\$12.95	\$11.35	\$10.35

HEATSINK ACCESSORIES & THERMAL PROTECTION

HEATSINKS & ACCESSORIES

DIECAST

- Dimensions: 150(L) x 75(H) x 46(D)mm



↑	Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
No Bracket	1.2°C/W	HH-8555	\$19.95	\$17.70	\$15.70

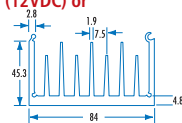
FAN ASSISTED-TYPE HEATSINK

This heatsink is designed to mate with itself to form a tunnel. The heatsink extrusion has a screw flute centre to enable 4 x No.6 self-tapping screws to fasten an 80mm standard type fan on one (or both) end/s to drive air through the heatsink assembly. It is ideal for high power amplifiers and power supplies. The entire assembly, including fan/s can still fit inside a 2 x Rackunit (88mm) enclosure. The heatsink also features ribbed fins for extra surface area, a 4mm thick base to enable thread tapping and small vee grooves on 5mm centres to facilitate mounting hole location. The centre groove, for example, is directly below the middle fin.

- Two standard lengths are available, black anodised.

Suitable fans are YX-2512 (12VDC) or YX-2510 (240VAC).

Note: Two heatsinks pictured



Thermal Characteristics	Cooling Mode	Rating (approx)
Assembly Type	Convection	0.83°C/W
Single Length	Convection	0.70°C/W
Tunnel Assembly	Fan Assisted (single)	0.35°C/W
Tunnel Assembly	Fan Assisted (dual)	0.30°C/W



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Length 225mm	HH-8530	\$24.95	\$22.35	\$19.70
Length 254mm	HH-8532	\$27.95	\$24.95	\$22.35

HEATSINK PIN GRID ARRAY WITH ADHESIVE THERMAL TRANSFER TAPE

This heatsink makes a perfect partner to Star LED modules. It doesn't get quicker or easier than this! Just peel the backing from the pre-mounted thermal transfer tape, press the Star LED (or whatever device) to the heatsink and SHAZAM!! It's ready to go! Don't be fooled by the compact size. The "pin grid array" design provides excellent low thermal resistance and heat dissipation. Sold individually.

- Dimensions: 21(L) x 21(W) x 6.2(H)mm

↑	Thermal resistance	Cat.	Qty 1+	Qty 4+	Qty 10+
	5.9°C/W	HH-8580	\$3.25	\$2.90	\$2.60

TRANSISTOR CLAMPS

To clamp (TO-220) devices to a heatsink.



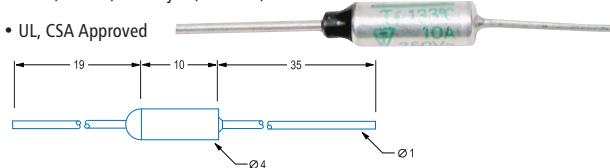
↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Single TO-220 Transistor Clamps Pk 10	HH-8600	\$8.95	\$7.95	\$6.95
Single TO-220 Transistor Clamps Pk 100	HH-8602	\$24.95	\$22.35	\$19.70
Dual TO-220 Transistor Clamps Pk 100	HH-8607	\$19.95	\$17.70	\$13.70
Dual TO-220 Transistor Clamp ea	HH-8610	\$1.45	\$1.30	\$1.15

THERMAL PROTECTION

THERMAL FUSES

These devices go open circuit permanently when they reach their rated temperature. They are used extensively in 240V mains rated appliances including, heaters, fan heaters, curlers, hair dryers, toasters, etc.

- UL, CSA Approved



Cat. No	T _F °C	T _H °C	T _m °C	Opening Temp
ST-3800	75	50	105	70°C +3/-1
ST-3804	136	101	166	132°C +2/-2
ST-3808	158	123	263	154°C +0/-5
ST-3810	185	150	263	182°C +1/-3
ST-3812	219	174	249	214°C +2/-2
ST-3814	233	188	263	229°C +1/-3

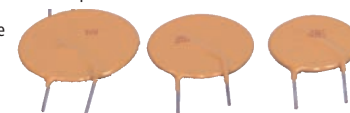
↑	Marking	Cat.	Qty 1+	Qty 10+	Qty 25+
	Yellow	ST-3800	\$3.50	\$3.15	\$2.75
	Grey	ST-3804	\$3.50	\$3.15	\$2.75
	Black	ST-3808	\$3.50	\$3.15	\$2.75
	Light Green	ST-3810	\$3.50	\$3.15	\$2.75
	Dark Green	ST-3812	\$3.50	\$3.15	\$2.75
	Dark Blue	ST-3814	\$3.50	\$3.15	\$2.75

POLYSWITCHES

PTC FUSES - CIRCUIT PROTECTION

Polyswitch protectors are based on conductive polymers and act like resettable solid state circuit breakers. When the operating current of the protector is exceeded the interior of the device partially melts, which increases the volume increasing the resistance drastically. This in turn reduces the current. The device stays in this state while the current is maintained because its temperature is elevated. Once the current is removed, the device re-establishes itself almost immediately, so that the low resistance value is restored.

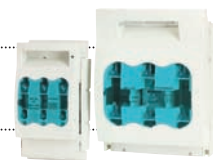
- Voltage ratings RN3460/62 - 60V; the rest are 50V.



Cat.	Industry Part No	Trip Watts 4Ω	6Ω	8Ω	Trip Current Amps
RN-3460	RXE075	5.1	7.7	10.2	1.50
RN-3462	RXE090	7.3	10.9	14.6	1.8
RN-3464	RXE110	10.9	16.3	21.8	2.2
RN-3466	RXE160	23.0	34.6	46.1	3.2
RN-3468	RXE185	31.4	47.0	62.7	3.7
RN-3470	RXE250	56.3	84.4	112.5	5.0

↑	Industry No.	Cat.	Qty 1+	Qty 10+	Qty 25+
	RXE075	RN-3460	\$2.95	\$2.60	\$2.30
	RXE090	RN-3462	\$3.25	\$2.90	\$2.60
	RXE110	RN-3464	\$3.50	\$3.15	\$2.75
	RXE160	RN-3466	\$3.95	\$3.45	\$3.15
	RXE185	RN-3468	\$3.95	\$3.45	\$3.15
	RXE250	RN-3470	\$4.50	\$3.95	\$3.60

CHECK OUT OUR RANGE OF HIGH CURRENT FUSES & FUSEHOLDERS ON PAGE 361



MONTHLY SPECIALS

Look out for our monthly promotions in store now!

LET'S FIND EVERYTHING YOU NEED!

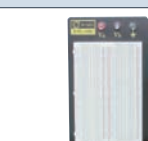
FROM
\$16.95
TH-1987



SERVICE AIDS

P177

FROM
\$43.95
PB-8816



BREADBOARDS

P25

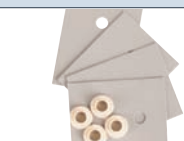
FROM
\$0.85
HH-8502



HEATSINKS

P113

FROM
\$3.75
HP-1174



TRANSISTOR INSULATORS

P78

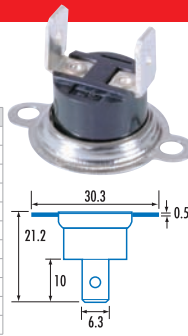
CIRCUIT PROTECTION

THERMOSTAT SWITCHES

AUTOMATIC RESETTING BI-METALLIC DISC, SNAP ACTING
This phenolic-housed unit attaches to any metal surface.

- Normally closed or normally open available

Specifications:	
Operating tolerance	+/- 5°C (32VDC), +/- 8°C (125VAC), +/- 10°C (250VAC)
Reset differential	10°C - 50°C
Contact endurance	32VDC - 100mA - 50,000 cycles
Cycles	125VAC - 10A - 100,000 cycles
Cycles	250VAC - 6A - 30,000 cycles
Interrupt capacity	125VAC x 60A - 5 cycles
Overshoot temperature	200°C/5 minutes
Dielectric strength	1500VAC 1 minute
Reset type	Auto Reset



NORMALLY CLOSED

When the surface meets or exceeds a certain temperature, the SPST bi-metallic element goes open circuit.

- The unit resets automatically when temperature falls below specified limit.
- Ideal for any electrical item that needs thermal protection.

Opening Temp (°C)	Reclosing Temp (approx) (°C)	Cat.	Qty 1+	Qty 10+	Qty 25+
60	40	ST-3821	\$5.75	\$4.95	\$4.60
70	58	ST-3823	\$5.75	\$4.95	\$4.60
90	75	ST-3825	\$5.75	\$4.95	\$4.60
100	85	ST-3826	\$5.75	\$4.95	\$4.60

NORMALLY OPEN

These thermostat switches have normally open contacts. They operate once the temperature reaches a specified limit and automatically reset to their original normally open state once the temperature drops below its rated temperature. These are suitable for power amplifier applications and other temperature sensitive devices where a cooling fan needs to be integrated to cool the device down. Mounting holes are provided, ideal for attachment to a heatsink or any metallic surface.

Thermostat (°C)	Cat.	Qty 1+	Qty 10+	Qty 25+
50	ST-3831	\$5.75	\$4.95	\$4.60
70	ST-3833	\$5.75	\$4.95	\$4.60
100	ST-3836	\$5.75	\$4.95	\$4.60

CIRCUIT BREAKERS

CHASSIS MOUNT AUTO CIRCUIT BREAKERS

Single pole thermal circuit breaker. Auto reset.

- 12 and 24VDC in current ratings from 20 - 50A.



SEE PAGE 361 FOR OUR RANGE OF HIGH CURRENT AC & DC CIRCUIT BREAKERS

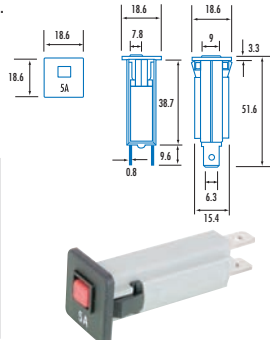
Amp	Voltage	Cat.	Qty 1+	Qty 10+	Qty 25+
20A	12VDC	SF-4100	\$7.95	\$6.95	\$6.25
30A	12VDC	SF-4102	\$7.95	\$6.95	\$6.25
40A	12VDC	SF-4104	\$7.95	\$6.95	\$6.25
50A	12VDC	SF-4106	\$7.95	\$6.95	\$6.25
20A	24VDC	SF-4108	\$7.95	\$6.95	\$6.25

PANEL MOUNT THERMAL CIRCUIT BREAKERS (CBE)

IEC 934 TYPE "R/TO"

These attractive looking units feature a black 19mm square facade with a centrally mounted bright red 'trip' button.

- When tripped, the red button extends
- To reset simply push button back in (once fault has been cleared)
- Slow response time ideal for inductive/reactive loads



Specifications	
Hold current	100% load indefinitely
Trip current	Within 1 hour @ 135% load Within 1 min. @ 200% load
Input	32VDC, 125VAC & 250VAC
Dielectric strength	1500VAC 1 Minute
Contact endurance	> 500 cycles @ 150% of contact rating.

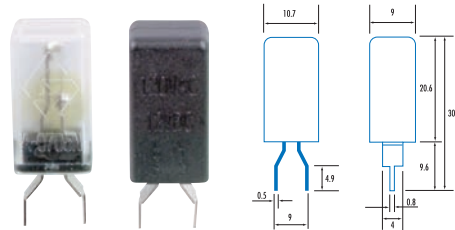
Amp	Resistance (Ω)	Cat.	Qty 1+	Qty 10+	Qty 25+
3	0.16	SF-2293	\$8.95	\$7.95	\$6.95
5	0.12	SF-2295	\$8.95	\$7.95	\$6.95
7	0.075	SF-2297	\$8.95	\$7.95	\$6.95
10	0.015	SF-2300	\$8.95	\$7.95	\$6.95
15	0.008	SF-2315	\$8.95	\$7.95	\$6.95

PCB MOUNT THERMAL CIRCUIT BREAKERS (SPST)

Miniature auto-resetting thermal type units that solder directly into a PCB.

- Ideal for protecting power supplies, amplifier output transistors, appliances etc.
- Slow response time is ideal when capricious tripping would be a nuisance.
- Judicious selection of breaker rating will ensure protection without unnecessary tripping

Specifications	
Calibration	100% rated; will not trip. (all at 25°C) 101-170% increasing likelihood of trip / 175-199% trip within 1 hour. 200% within 1 minute / 200% + from 1 minute to seconds.
Input	12VDC, 125VAC
Dielectric strength	1500VAC 1 Minute
Contact endurance	> 1000 cycles, @ 150% of contact rating.



Amp	Resistance (Ω)	Cat.	Qty 1+	Qty 10+	Qty 25+
1.5	0.12	SF-2281	\$6.95	\$6.25	\$5.50
3	0.075	SF-2283	\$6.95	\$6.25	\$5.50
4	0.050	SF-2284	\$6.95	\$6.25	\$5.50
5	0.050	SF-2285	\$6.95	\$6.25	\$5.50

ELECTRICAL TYPE CIRCUIT BREAKER

These circuit breakers are rated at 250VAC.

- Maximum voltage 250VAC or 50VDC
- Will hold 100% of rated current indefinitely at 25°C
- Derate at higher temperatures
- Manual push reset
- Insulation resistance > 100MΩm
- Mounting hole diameter 12mm
- Size 46(H including terminals) x 35.7(D) x 14.6(W)mm

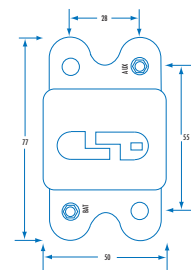


Typical Derating Factors		% of Rating	Time to Trip
Temp °C	10-25A	2-5A	
60	0.50	-	100 Indefinite
50	0.60	-	< 1 hour
40	0.72	0.45	200 4.0-30.0 sec
30	0.85	0.70	300 2.5-11.0 sec
25	1.00	1.00	400 1.6-7.0 sec
20	1.10	1.20	500 0.8-2.5 sec
10	1.25	1.45	600 0.6-1.7 sec

Amp	Approval	Cat.	Qty 1+	Qty 10+	Qty 25+
3	CS8389N	SF-2252	\$8.85	\$7.75	\$6.95
5	CS8389N	SF-2254	\$8.85	\$7.75	\$6.95
10	CS8389N	SF-2258	\$8.85	\$7.75	\$6.95
15	CS8389N	SF-2259	\$8.85	\$7.75	\$6.95
20	CS8389N	SF-2260	\$8.85	\$7.75	\$6.95
25	CS8389N	SF-2261	\$8.85	\$7.75	\$6.95

HIGH CURRENT DC CIRCUIT BREAKERS

Moulded in black electrical grade bakelite, these rugged and reliable devices allow you to simply reset rather than find another expensive fuse. They offer lower voltage drop than a fuse and can be used as an occasional circuit isolation switch. Two popular current ratings. Both units have the same physical dimensions. Ideal for car sound installations. Operating voltage is 12 to 14VDC. Each device will trip within a few milliseconds under short circuit conditions and feature protective rubber caps, test button and gold plated 5mm dia. terminals.



70A 12-14VDC

Will trip within 1 minute at 90A load. Will trip within a few milliseconds under short circuit conditions. Supplied with 5mm dia gold plated terminals with captive shakeproof washer and provision for up to 1/4" mounting bolts. Protective rubber caps for terminals. Test button on top of unit enables circuit breaker to be used as switch circuit restored with simple lever action.



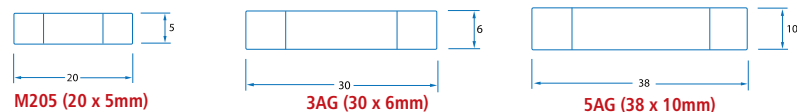
100A 12-14VDC

Will trip at 110A or immediately under short circuit conditions

Rating (A)	Resistance (Ω)	Cat.	Qty 1+	Qty 10+	Qty 25+
70	0.12	SF-2265	\$26.95	\$23.95	\$21.35
100	0.075	SF-2266	\$26.95	\$23.95	\$21.35

CIRCUIT PROTECTION

FUSE DIMENSIONS



M205 FUSES - 20 x 5MM

M205 FAST BLOW

100mA	Cat. SF-2148	1.6A	Cat. SF-2161
160mA	Cat. SF-2152	2.5A	Cat. SF-2169
200mA	Cat. SF-2153	3A	Cat. SF-2162
250mA	Cat. SF-2154	3.15A	Cat. SF-2163
315mA	Cat. SF-2155	4A	Cat. SF-2164
500mA	Cat. SF-2156	5A	Cat. SF-2166
800mA	Cat. SF-2157	6.5A	Cat. SF-2167
1A	Cat. SF-2158	10A	Cat. SF-2168
1.25A	Cat. SF-2159		
2A	Cat. SF-2160		

Quantity breaks for one type only

Cat.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$0.40	\$0.35	\$0.30

M205 SLOW BLOW

Slow blow M205 size glass fuses. Rated voltage 250VAC. Dimensions 20(L) x 5(Dia)mm

500mA	Cat. SF-2170	3.15A	Cat. SF-2177
1A	Cat. SF-2172	4A	Cat. SF-2175
1.5A	Cat. SF-2173	5A	Cat. SF-2178
2A	Cat. SF-2174	10A	Cat. SF-2179
3A	Cat. SF-2176		

Quantity breaks for one type only

Cat.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$1.25	\$1.10	\$0.97

M205 CERAMIC FAST BLOW

These fuses are used in microwave ovens and precision equipment. They are fast acting and rapidly respond to a fault condition. They are sand filled and their interrupting capacity is 1500A at 240VAC.

1.0A	Cat. SF-2104	4.0A	Cat. SF-2108
1.6A	Cat. SF-2106	5.0A	Cat. SF-2109
2.5A	Cat. SF-2107	6.3A	Cat. SF-2110
3.15A	Cat. SF-2105	8A	Cat. SF-2112
		10A	Cat. SF-2114

Quantity breaks for one type only

Cat.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$1.25	\$1.10	\$0.97

M205 CERAMIC SLOW BLOW

1.0A	Cat. SF-2115	6.3A	Cat. SF-2119
4A	Cat. SF-2118	2.5A	Cat. SF-2117
1.6A	Cat. SF-2116	8A	Cat. SF-2121

Quantity breaks for one type only

Cat.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$1.45	\$1.30	\$1.15

M205 FUSE PACKS

40 FUSES

5 x 500mA, 10 x 1A, 10 x 2A, 5 x 3A, 5 x 5A, 5 x 10A

Cat.	Qty 1+	Qty 10+	Qty 25+
SF-2242	\$12.95	\$11.35	\$10.35

5AG FUSES - 3/8" x 1 1/2"

(10 X 38MM)

- Gold plated
- Suits the gold fuse holders in the car audio section.
- Fuse size 38(L) x 10(Dia)mm.

20A	Cat. SF-1970	50A	Cat. SF-1976
30A	Cat. SF-1972	60A	Cat. SF-1978
40A	Cat. SF-1974		

Qty breaks for one type only

Cat.	Qty 1+	Qty 4+	Qty 10+
All Types / Each	\$2.25	\$1.95	\$1.80

3AG FUSES - 1/4"x1 1/4" (30x6mm)

3AG FAST BLOW

100mA	Cat. SF-2182	4A	Cat. SF-2198
150mA	Cat. SF-2184	5A	Cat. SF-2200
250mA	Cat. SF-2186	7A	Cat. SF-2201
500mA	Cat. SF-2188	7.5A	Cat. SF-2202
630mA	Cat. SF-2189	10A	Cat. SF-2204
1A	Cat. SF-2190	15A	Cat. SF-2206
1.5A	Cat. SF-2192	20A	Cat. SF-2208
2A	Cat. SF-2194	25A	Cat. SF-2210
3A	Cat. SF-2196		

Quantity breaks for one type only

Cat.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$0.40	\$0.35	\$0.30

3AG SLOW BLOW

Slow blow 3AG size glass fuses. Rated voltage 250VAC. Dimensions 30(L) x 6(Dia)mm

1A	Cat. SF-2226	4A	Cat. SF-2231
1.5A	Cat. SF-2227	5A	Cat. SF-2232
2A	Cat. SF-2228	7.5A	Cat. SF-2233
3A	Cat. SF-2230	10A	Cat. SF-2234

Quantity breaks for one type only

Cat.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$1.25	\$1.10	\$0.97

3AG CERAMIC FAST BLOW

These fuses are used in microwave ovens and precision equipment. They are fast acting and rapidly respond to a fault condition. They are sand filled and their interrupting capacity is 1500A at 240VAC.

7A	Cat. SF-2120		
8A	Cat. SF-2122		
10A	Cat. SF-2124		

Quantity breaks for one type only

Cat.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$1.25	\$1.10	\$0.97

3AG FUSE PACKS

40 FUSES

The economical way to buy fuses. Consists of: 4 x 500mA, 8 x 1A, 6 x 1.5A, 4 x 2A, 6 x 3A, 4 x 5A, 4 x 7.5A, 4 x 10A

Cat.	Qty 1+	Qty 10+	Qty 25+
SF-2240	\$12.95	\$11.35	\$10.35

DMM FUSES

FAST ACTING CARTRIDGE FUSES

For use in multimeters. As used in multimeters. Fast acting fuse designed for use in circuits with high AC fault current capacity. Listed by Underwriters Laboratories and certified by CSA.

SF-2276 1A 600V
Dimensions: 35 x 10 mm

SF-2277 1kV 10A.
SF-2274 15A 600V
Dimensions: 38 x 10 mm

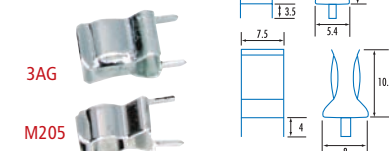
Spare ferrule fuses for our IP67 CAT IV rated DMMs:
SF-2278 1kV 500mA
SF-2279 1kV 800mA
Dimensions: 32 x 6.35mm

Cat.	Qty 1+	Qty 3+	Qty 6+
SF-2276	\$8.95	\$7.95	\$6.95
SF-2278	\$9.95	\$8.75	\$7.75
SF-2279	\$9.95	\$8.75	\$7.75
SF-2274	\$17.95	\$15.95	\$14.35
SF-2277	\$14.95	\$13.35	\$11.70

PCB MOUNT FUSE HOLDERS

FUSE CLIPS

- Nickel plated
- PCB mount



↑	Pkt	Cat.	Qty 1+	Qty 10+	Qty 25+
M205	8	SZ-2018	\$2.75	\$2.45	\$2.15
M205	100	SZ-2019	\$18.95	\$16.95	\$14.95
3AG	8	SZ-2022	\$2.75	\$2.45	\$2.15
3AG	100	SZ-2023	\$18.95	\$16.95	\$14.95

M205 PCB MOUNT FUSE HOLDER

PCB mounting M205 fuse holder. Supplied with screw cover to hold fuse in place.

- Max Fuse: 6.3A @ 250VAC

Mount	Cat.	Qty 1+	Qty 10+	Qty 25+
Vertical	SZ-2038	\$3.50	\$3.15	\$2.75
Horizontal	SZ-2039	\$3.50	\$3.15	\$2.75

INLINE FUSE HOLDERS

3AG

Plastic in-line type.

- As used on car radios, CB, etc.
- Takes 3AG fuses.
- Low volt DC only • 5A max.

Cat.	Qty 1+	Qty 10+	Qty 25+
SZ-2015	\$1.75	\$1.55	\$1.40

3AG MOISTUREPROOF FUSEHOLDER

Two rubber parts push together over the fuse to keep moisture out. Ideal for boats, cars etc.

- Cable needs to be soldered on, crimped to end parts.
- Could be made virtually waterproof with some silicone sealant.
- Low volt DC only / 10A max

Cat.	Qty 1+	Qty 10+	Qty 25+
SZ-2014	\$2.50	\$2.21	\$1.95

3AG 20A HIGH CURRENT

If you want to fuse something higher than 5 amp you will need this holder.

- Super strong plastic holder
- Supplied with cable loop.
- Simply cut and join to existing cables.
- Low volt DC only

Cat.	Qty 1+	Qty 10+	Qty 25+
SZ-2016	\$3.50	\$3.15	\$2.75

5AG 60 AMP

For high-powered car sound systems.

- Accepts 5AG fuse.
- 80(L) x 19(D)mm.
- Supplied with a small length of cable, simply cut and join in line.
- Low volt DC only

Cat.	Qty 1+	Qty 10+	Qty 25+
SZ-2065	\$7.95	\$6.95	\$6.25

FUSE WIRE

FUSE WIRE

Includes 8 amp for lights and 15 amp for power. An essential item to carry in the fuse box of older homes. Have it there when you need it..

BLADE FUSES ARE ON PAGE 299.

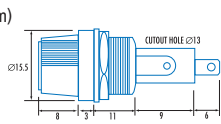
Cat.	Qty 1+	Qty 10+	Qty 25+
SZ-2005	\$2.95	\$2.60	\$2.30

CIRCUIT PROTECTION

PANEL FUSE HOLDERS

M205 - LOW VOLT ONLY

- Takes M205 fuses (20 x 5mm)
- Recommended for low voltage or DC side circuits only.
- Panel hole 13mm.
- 6.3A 240V max.

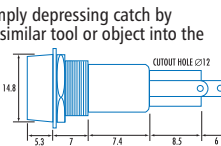


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2030	\$1.95	\$1.75	\$1.55

M205 - SAFE

Fuse retainer is released by simply depressing catch by inserting a screwdriver or any similar tool or object into the small rectangular hole on top of the fuseholder.

- Panel hole 12mm.
- 6.3A 240V max.

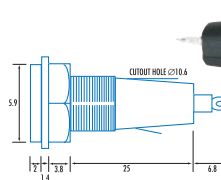


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2034	\$1.95	\$1.75	\$1.55

M205 - VERY SAFE

6.3A 250V.

- Panel hole 11mm.
- Fits M205 size fuses
- Screwdriver cover removal
- Fingers cannot touch metal inside

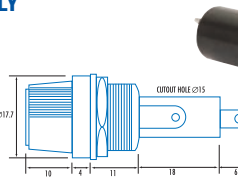


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2028	\$2.75	\$2.45	\$2.15

3AG - LOW VOLT ONLY

Panel mount type.

- Accepts 3AG fuses.
- Panel hole 15mm.
- Recommended for low voltage or DC side circuits only.
- 10A max.

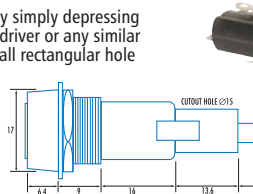


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2020	\$1.95	\$1.75	\$1.55

3AG - SAFE

Fuse retainer is released by simply depressing catch by inserting a screwdriver or any similar tool or object into the small rectangular hole on top of the fuseholder.

- Panel hole 15mm.
- 10A max.

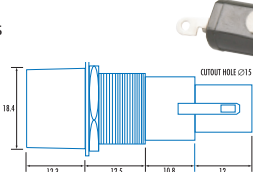


↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2036	\$2.75	\$2.45	\$2.15

3AG - VERY SAFE

3AG 10 amp 240V chassis mount (32 x 6.35 mm)

- Screwdriver cover removal
- Fingers cannot touch metal inside
- 10A max.



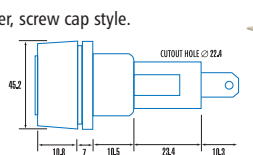
↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2025	\$2.95	\$2.60	\$2.30

5AG - LOW VOLT ONLY

Panel mounting fuse holder, screw cap style.

Suits 5AG sized fuses up to 30A current rating.

- Low voltage only



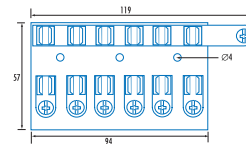
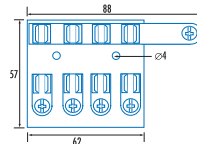
↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SZ-2029	\$4.95	\$4.45	\$3.90

FUSE HOLDERS

FUSE GANG BLOCKS

All have natural brass contacts riveted to a fibreglass filled nylon board. Both can be easily split into modules of two. Ideal for automotive, aircraft, marine or other low voltage applications.

- 4 & 6 Way with power/ earth bus.
- Accepts 3AG type fuses
- Plated screw terminals
- Can be safely screwed to a metal surface (low voltage only)
- 15A max. all models

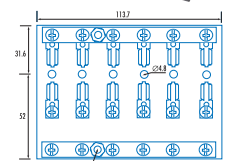
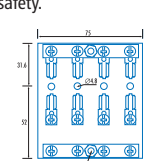
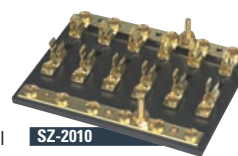


↑	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
	4 way 57 x 60mm	SZ-2006	\$10.95	\$9.75	\$8.75
	6 way 57 x 90mm	SZ-2007	\$12.95	\$11.35	\$10.35

DOUBLE BUSBAR FOR 3AG FUSES

One bus connected to one side of fuse clip. This could be, say, to +12V. The other side of the clip is riveted to the board and has a brass power screw termination. You could wire to your application and return to the other busbar for say, earth. We recommend that this board is stood off from a metal bulkhead for extra electrical safety.

- Accepts 3AG fuses.
- 15A max. all models



↑	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
	4 way 83 x 75mm	SZ-2009	\$17.95	\$15.95	\$14.35
	6 way 83 x 100mm	SZ-2010	\$19.95	\$17.70	\$15.70

MARINE GRADE ILLUMINATED SWITCH PANELS WITH CIRCUIT BREAKERS

An economical solution to controlling multiple DC circuits on your boat, or any other application where you want to switch multiple DC circuits. Each switch panel is an attractive moulded ABS plate, with high quality 10A rated illuminated rocker switches and re-settable circuit breakers on each circuit. Power is supplied on a common rail to keep wiring neater, and wiring connections are made with standard spade terminals.

Two versions available:

4 Way - Dimensions 110(H) x 100(W) x 45(D)mm
Cat. SZ-1902

6 Way - Dimensions 160(H) x 100(W) x 45(D)mm
Cat. SZ-1903



↑	Size	Cat.	Qty 1+	Qty 10+	Qty 25+
	4 Way	SZ-1902	\$34.95	\$31.45	\$27.90
	6 Way	SZ-1903	\$44.95	\$40.45	\$35.90

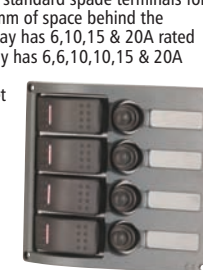
IP66 MARINE SWITCH PANELS WITH CIRCUIT BREAKERS

These units feature the attractive tactile rocker switches that are common on luxury Australian and foreign made motor cruisers. The panels have Butyl rubber gaskets and IP66 water resistant rated switches and circuit breakers, making these switch panels suitable for an exposed environment. They are pre-wired as much as possible, with wiring connections made via standard spade terminals for ease. Both require about 80mm of space behind the mounting bulkhead. The 4 way has 6, 10, 15 & 20A rated circuit breakers and the 6 way has 6, 6, 10, 10, 15 & 20A breakers, and the switches feature LED illumination to let you know which circuit is active.

- Moulded from ABS plastic, black in colour.

Two versions available:

Dimensions:
4 Way: 120(H) x 130(W)mm
6 Way: 170(H) x 130(W)mm



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 25+
	4 Way	SZ-1906	\$69.95	\$62.95	\$55.95
	6 Way	SZ-1907	\$99.95	\$89.95	\$79.95

RELAYS

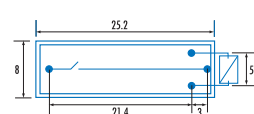
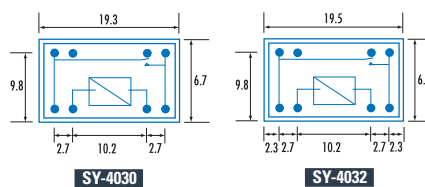
RELAYS PCB MOUNT

DUAL-IN-LINE REED STYLE RELAYS

They will fit into a 14 pin IC socket, are highly sensitive and can be driven by TTL, etc. Both are SPST normally open.

Specifications	SY-4030	SY-4032	SY-4036	SY-4038
Contact form	SPST normally open	SPST normally open	SPST normally open	SPST normally open
Coil Resistance	500Ω	1000Ω	500Ω	1050Ω
Nominal Voltage	5V	12V	5V	12V
Rated Current	10mA	12mA	20mA	11.4mA
Pickup Voltage	3.75V DC	9.0V DC	3.5V DC	8.4V DC
Dropout Voltage	0.8V DC	1.0V DC	0.5V DC	1.2V DC
Allowable Voltage	160%	160%	160%	160%
Power Consumption (W)	-	-	0.1	0.1
Contact Rating	0.5A	0.5A	1A	1A

↑ Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
5VDC	10mA	SPST	SY-4030	\$4.75	\$4.15	\$3.75
12VDC	12mA	SPST	SY-4032	\$4.75	\$4.15	\$3.75
5VDC	20mA	SPST	SY-4036	\$3.95	\$3.45	\$3.15
12VDC	11.4mA	SPST	SY-4038	\$3.95	\$3.45	\$3.15

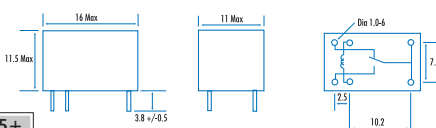


STANDARD COIL / CONTACT RELAYS

DIL TYPE - 6V 1A MINI

- Extra low profile. 6V DC bobbin
- 56 ohm coil resistance
- 1A / 125VAC
- PCB mount
- 1A contact rating.
- SPDT.
- Dimensions: 15 x 11 x 11(H)mm

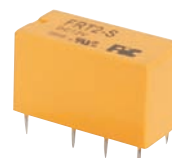
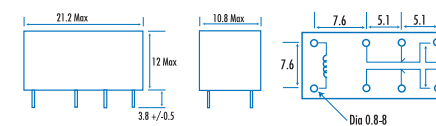
↑ Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
125VAC	1A	SPDT	SY-4058	\$7.95	\$6.95	\$6.25



DIL TYPE - 12V 5A MINI

- 12 volt DPDT relay.
- 12V DC coil.
- Max switching power 60W
- Dimensions: 20 x 10 x 9(H)mm
- High sensitivity 200mW pickup power
- Coil resistance 360Ω.
- 125VA.
- PCB mount

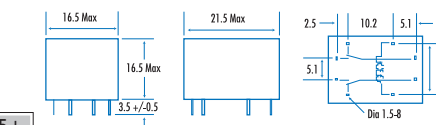
↑ Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	5A	DPDT	SY-4059	\$9.95	\$8.75	\$7.75



12V 1A DPDT

- Rated voltage - 12VDC
- Coil resistance - 400Ω
- Dimensions: 21(W) x 16(D) x 15(H)mm
- Coil current - 30mA
- Contact rating - 1 Amp

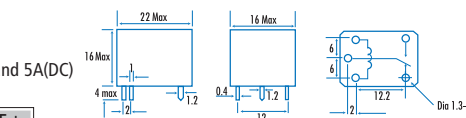
↑ Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	1A	DPDT	SY-4061	\$4.95	\$4.45	\$3.90



12V 10A SPDT

- Rated voltage - 12VDC
- Coil resistance - 400Ω
- Power consumption: 360mW
- NO/NC contacts
- Coil current - 30mA
- Contact rating - 10 Amp
- Maximum switching current: 10A(AC) and 5A(DC)
- Dimensions: 18(W) x 15(D) x 14(H)mm

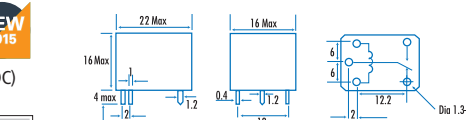
↑ Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	10A	SPDT	SY-4066	\$4.45	\$3.95	\$3.45



24V 10A SPDT

- Rated voltage: 24VDC
- Coil resistance: 1,600Ω
- Power consumption: 360mW
- NO/NC contacts
- Coil current: 15mA
- Contact rating: 10A
- Max switching current: 10A(AC) & 5A(DC)
- Dimensions: 22(L) x 16(W) x 16(D)mm

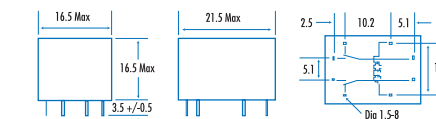
↑ Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
24VDC	10A	SPDT	SY-4067	\$4.45	\$3.95	\$3.45



12V 5A DPDT

- Extra heavy duty mini relay
- Coil current - 30mA
- Contact rating - 5 Amp
- Dimensions: 21(W) x 16(D) x 15(H)mm
- Rated voltage - 12VDC
- Coil resistance - 400Ω
- Power consumption - 360mW
- NO/NC contacts.

↑ Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	5A	DPDT	SY-4062	\$5.95	\$5.25	\$4.75

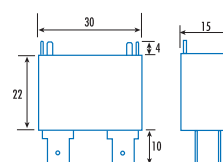


12V 20A SPST PCB MOUNT RELAY

PCB mounting 12V relay with QC lug terminals mounted conveniently on top of case. What a good idea!

- Coil voltage: 12VDC
- Coil resistance: 275 ohms
- Contact current: 20A@24VDC max
- Coil current: 44mA
- Contacts: SPST
- Dimensions: 30(L) x 22(W) x 15(H)mm!

↑ Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
12VDC	20A	SPST	SY-4029	\$8.95	\$7.95	\$6.95



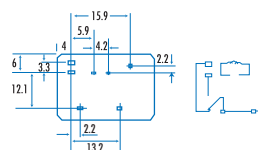
RELAYS

STANDARD COIL / CONTACT RELAYS (CONTINUED)

12V 30A SPDT - STANDARD SIZE (HORN RELAY)

PCB version of standard 30A horn type relay. Whilst designed for auto horns, this relay is ideal for any high current application i.e. burglar alarms, ignition cutout, transmitters, car spotlights etc.

- Contact current (max) 40A
- Contact voltage (nom) 12VDC
- Nominal coil voltage 12VDC
- PC Pin termination



↑ Voltage	Current	Contacts	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
12VDC	30A	SPDT	SY-4072	\$7.45	\$6.50	\$5.75

12V 2A DPDT LATCHING

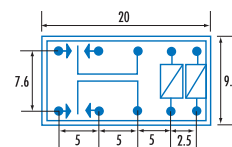
DIP style - will plug into 16 pin IC socket.
Low profile. Highly sensitive - 180mW nominal power consumption.

Specifications Coil

- 2 coil latching - 12VDC
- Minimum set and reset power 180mW
- Nominal set and reset power 360mW

Specifications Contact

- Max switching power 60W, 125VA
- Max switching voltage 220VDC, 250VAC
- Max carrying current
- 2A @ 30VDC, 1A @ 120VAC
- Dimensions: 20(W) x 10(D) x 10(H)mm.



↑ Voltage	Current	Contacts	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
12VDC	2A	DPDT	SY-4060	\$12.95	\$11.35	\$10.35

SPECIAL PC MOUNT

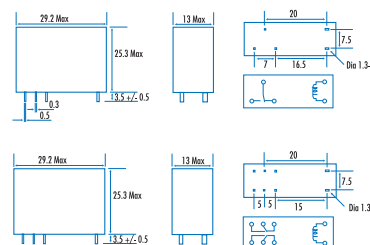
- Silver alloy contacts
- Telecoms grade

SPDT - 12/24VDC

- Coil 270Ω - 12VDC - SY-4050
- Coil 1100Ω - 24VDC - SY-4051
- 10A @ 30VDC or 10A @ 240VAC contact rating.

DPDT - 12/24VDC

- Coil 270Ω - 12VDC - SY-4052
- Coil 1100Ω - 24VDC - SY-4053
- 2 x 5A @ 30VDC or 2 x 5A @ 240VAC contact rating.
- Dimensions: 29(W) x 12(D) x 25(H)mm



↑ Voltage	Current	Contacts	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
12VDC	10A	SPDT	SY-4050	\$7.95	\$6.95	\$6.25
24VDC	10A	SPDT	SY-4051	\$8.95	\$7.75	\$6.95
12VDC	5A	DPDT	SY-4052	\$8.95	\$7.95	\$6.95
24VDC	5A	DPDT	SY-4053	\$9.95	\$8.75	\$7.75

DIN RAIL RELAY MOUNTING SOCKET

Suits relay types SY-4052 and SY-4053



**LOOKING FOR MORE INFO
VISIT OUR WEBSITE**

↑	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
	SY-4063	\$5.50	\$4.90	\$4.30

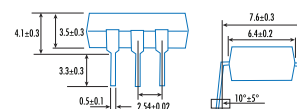
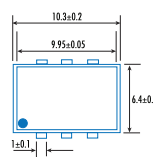
SOLID STATE RELAYS

Solid state relays are particularly useful when only low switching currents are available, such as those presented by CMOS or TTL circuits. Optically isolated for optimum safety, the relays feature high surge ratings to allow lamp and motor switching plus zero voltage turn-on and zero current turn off to minimise EMI and RFI emissions. Use this relay in conjunction with our remote control switches for safe 240V AC mains switching.

PCB MOUNT SOLID STATE DIL RELAY

Able to be triggered from low currents, and a super small package.
Low on resistance and very low quiescent current.

Specifications	SY-4090
Must release current	0.4mA
Must operate current	5mA
Maximum load voltage	60VDC
Maximum load current	150mA
Package	6 pin DIL



↑ Voltage	Current	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
5V	500mA	SY-4090	\$4.95	\$4.45	\$3.90

TECH TALK!

HOW TO TURN AN ORDINARY RELAY INTO LATCHING TYPE

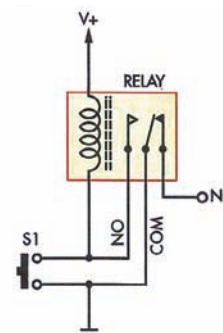
Sometimes you want to energise a relay to stay "on" instead of only momentarily staying on. For example you may want to make an electric motor, or a solenoid to stay on for some time.

You can do this with the circuit shown.
The key to this is a momentary push button switch (there are many in this catalogue.)

Pressing the push button switch (S1) activates the relay and closes the NO (Normally Open) and COM (Common) contacts. These contacts form a parallel connection across S1. Even if S1 is now opened, the relay will stay ON, or "latched."

To turn the relay off, you must interrupt power to the coil, in other words, switch V+ off, even momentarily. Even if you switch V+ on again, the relay will remain off, until you push S1 again.

Note: While the relay is energized, it will continue to draw coil current. True mechanical latching relays do not do this.



RELAYS

SOLID STATE RELAYS (CONTINUED)

PCB MOUNT SOLID STATE RELAYS, LOW CURRENT

Low profile PCB mounting solid state relays with LED input status indication. Suitable for applications such as I/O interfaces and programmable logic controllers. Three types available:

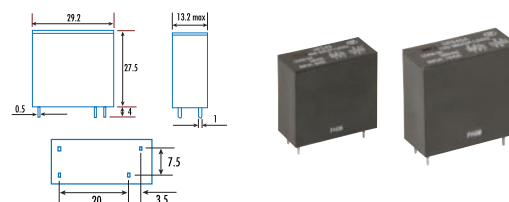
SY-4093: 12VDC, DC POWER

Specifications	SY-4092	SY-4093	SY-4097
Control voltage range	4 - 6VDC	9.6 - 14.4VDC	9.6 - 14.4VDC
Max. input current	20mA	20mA	20mA
Load voltage	3 - 52.8VDC	3 - 50VDC	75 - 400VAC
Load current	0.01 - 2A	0.01 - 2A	0.1 - 3A

Will only switch off if DC power interrupted Will only switch off if DC power interrupted

SY-4097: 12VDC RANDOM TURN ON

Type: Random turn on, solid state relay. When the control voltage is given the relay output will turn on regardless of what the line voltage is. Suitable for inductive loads.



TECH TALK!

SY-4097 will switch off if control voltage is removed when AC power source crosses through zero

NEW
LOW
PRICE

↑ Voltage	Current	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
5VDC	2A	SY-4092	\$5.95	\$5.25	\$4.75
12VDC	2A	SY-4093	\$5.95	\$5.25	\$4.75
12VDC	3A	SY-4097	\$3.95		

SY-4080: MAINS TYPE

Specifications - Output Circuit	SY-4080
Max load current	3A
Nominal line voltage	240V AC
Load voltage range	24-280V AC
Min. blocking voltage	600V AC
Max one-cycle surge current	80A
Min. load current	50mA
AC current	3A max

Specifications - Input Circuit	
Control voltage	3-32V DC
Control current	15mA Max
Min. turn off voltage	1V DC
Input resistance	2.2kΩ min



Not for controlling DC

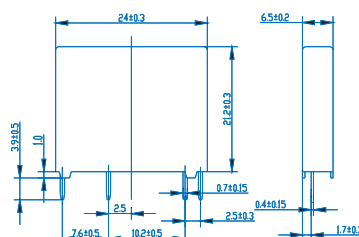


↑ Voltage	Current	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
3-32VDC	3A	SY-4080	\$17.95	\$15.95	\$14.35

SLIM 5V, 12V

- Ultra slim
- Photo isolation
- Sealed type
- 2A switching
- 600V blocking voltage

Specifications	5VDC (SY-4088)	12VDC (SY-4089)
Dielectric strength	20000VAC (1 minute)	20000VAC (1 minute)
Insulation Resistance	100MΩ (at 500VDC)	100MΩ (at 500VDC)
Operating temperature	-30°C to +80°C	-30°C to +80°C
Input Ratings		
Control Voltage	4-6 VDC	9.6 - 14.4 VDC
Maximum Current	15mA	15mA
Voltage On	4V	4V
Current Off	1V	1V
Output Ratings		
Voltage (AC Power)	50 - 250VAC	50 - 250VAC
Maximum Current	2A	2A
Surge Current	30A	30A



↑ Voltage	Current	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
5VDC	2A	SY-4088	\$6.95	\$6.25	\$5.50
12VDC	2A	SY-4089	\$6.95	\$6.25	\$5.50

CHASSIS MOUNT SOLID STATE RELAYS, HIGH CURRENT

Both look similar but are in fact quite different

SY-4084 40A, 240VAC TRIAC TYPE

This unit has a dielectrically isolated D.C. control input that controls a 40amp TRIAC. This means that you can control AC mains up to 40A RMS. It also means that it will not control D.C.. For that you need the SY-4086 below.

Specifications for SY-4084

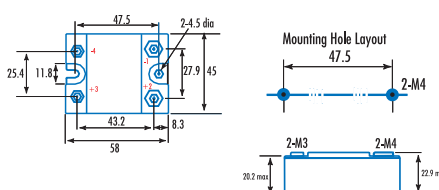
- Dielectric isolation rating 4000VAC
- Opto isolated control, 4V min, 32V max (D.C.)
- TRIAC controlled AC out. 48-280VAC.
- Built-in snubber
- RoHS compliant.

SY-4086 100A, 0-30VDC MOSFET TYPE

This unit has a dielectrically isolated D.C. control input to switch a MOSFET which can control loads of up to 100A @ 30VDC. It will not switch AC. To switch AC use the SY-4084. NB: Mechanical details same for both units. Advantages of SY-4086. Switching high current D.C. was previously accomplished by high current contactors. Contactors, however, wear out quickly as they are plagued by arcing of the actual contacts. There is no arcing with MOSFETS and their very low ON-resistance (in this case 3.5 milli Ω) ensures little wasted energy.

Specifications - Output Circuit		Specifications - Input Circuit	
Load Voltage	0-30VDC	Control Voltage	3-32VDC
Load Current	0.02-100A	Control Current	28mA max.
Max On-State Resistance	0.0035Ω	Min Turn Off Voltage	1.0VDC
Max On-State Voltage Drop	0.35V		
Max Turn On Time	0.5ms		
Max Turn Off Time	0.5ms		
Max Surge Current	240A (10ms)		

↑ Voltage	Current	Cat.	Qty 1 +	Qty 10 +	Qty 25 +
240VAC (ONLY)	40A	SY-4084	\$47.95	\$42.95	\$38.45
30VDC	100A	SY-4086	\$49.95	\$44.90	\$39.90
Heatsink to suit		SY-4085	\$9.95	\$8.75	\$7.75



Fast recovery diode*

DC Output Solid State Relay Schematic



*The diode is required to prevent back EMF problems with inductive loads. The diode should be a fast recovery type with a PIV rating greater the VDC Power Supply.

HEATSINK TO SUIT SY4084/SY4086

Using this heat sink with the SY-4084/SY-4086 solid state relays assures you reach the full current capacity. Solid state relays become quite hot when used in a high current application, so suitable heat sinking is essential. Datasheet available on our website.

- Thermal resistance - 1.1 °C/W
- Dimensions - 118(W) x 110(L) x 64(H)mm



RELAYS

CRADLE RELAYS

CRADLE RELAY - DPDT

DIN mount cradle relays. Available in 12V or 24VDC configuration.

Base to suit: SY-4064

- Relay 24VDC 10A
- Coil current: 58mA
- Contact resistance: 50 milliohms
- Must operate voltage: 19.2VDC
- Coil resistance: 650Ω (SY-4007), 160Ω (SY-4008)
- Rated coil voltage: 24VDC
- Contact rating: 10A (resistive load)
- Operate time: 25ms max,
- Operational life: 20 million cycles,

↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	10A	DPDT	SY-4008	\$7.95	\$6.95	\$6.25
	24VDC	10A	DPDT	SY-4007	\$7.95	\$6.95	\$6.25

CRADLE RELAY - DPDT

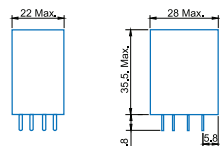
For heavy current switching for mains appliances eg. high power speakers.

- Contact rated at 10A 240VAC.
- Coil 12VDC 160 ohms.
- Suitable base: Use SY-4064 cradle
- NO/NC contacts.
- DPDT contacts.
- Dimensions: 27(W) x 20(D) x 35(H)mm.

↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	240VAC	10A	DPDT	SY-4065	\$7.95	\$6.95	\$6.25

CRADLE RELAY - 4PDT

- Rated Voltage: 12VDC
- Coil Resistance: 180Ω
- Contact Rating: 5A NO/NC contacts
- 27(W) x 21(D) x 35(H) excl pins.



↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	5A	4PDT	SY-4009	\$9.95	\$8.75	\$7.75

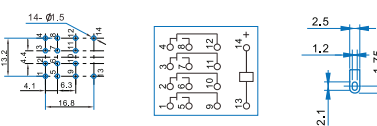
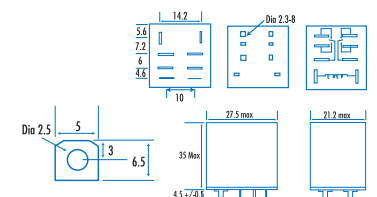
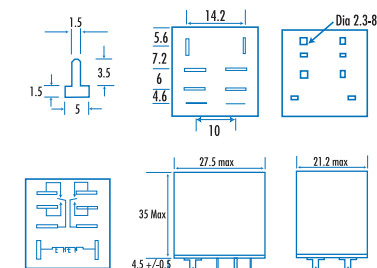
DIN RAIL MOUNT RELAY SOCKET

DIN rail mounting base for SY-4009. Also has 4mm holes so can be screw mounted to a chassis.

- Dimensions: 71(L) x 29(W) x 30(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Suits SY-4009	SY-4004	\$5.95	\$5.25	\$4.75



CRADLE RELAY BASE

Quality DIN rail mount with screw terminals.

- Suits SY-4065
- Dimensions: 72(W) x 29(D) x 30(H)mm.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Suits SY-4065	SY-4064	\$4.95	\$4.45	\$3.90

PANEL/CHASSIS MOUNT RELAYS

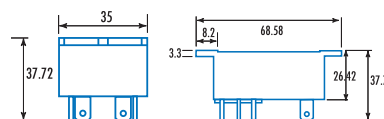
All feature rugged construction and quick connect terminals for easy installation.

24VDC OR 240VAC, DPDT, 30A

Two models available. One with a nominal 240VAC coil and one with 24VDC coil.

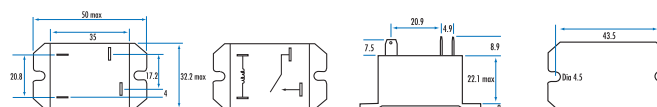
- Contact Form: DPDT
- Contact Rating: 30A NO / 3A NC
- 24V Model Coil Resistance: 350 ohm
- 240V Model Coil Resistance: 3800 ohm@50Hz

↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	24VDC	30A	DPDT	SY-4041	\$19.95	\$17.70	\$15.70
	240VAC	30A	DPDT	SY-4044	\$19.95	\$17.70	\$15.70



12VDC, SPST 30A

- Contact Voltage (nom): 12VDC
- QC tab termination - 4.8mm coil, 6.4mm contacts
- 30A
- Used in heavy duty applications like air conditioning, heating etc.
- Coil: 12V, 120 ohm
- Loads up to 7,500W,
- High inrush capability: 65A, 10,000V



↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	30A	SPST	SY-4040	\$7.95	\$7.10	\$6.25

6 WAY MEMBRANE SWITCH PANEL WITH RELAY BOX - IP67

An ultra compact 6-way 12VDC touch control panel to control devices in automotive, camping, or marine applications. It features an ultra thin and flexible membrane switch panel with almost no mounting depth requiring only a very small cut-out. The 6 buttons on the switch panel control 6 relays in the separate control box for switching on/off any connected devices with ease, with the switch panel connecting to the control box with an included 1m long ribbon cable. This gives you a completely waterproof (IP67) switch panel, with all the wiring taken care of behind your dash/panel, resulting in a neat and unobtrusive 6-way switch interface.

- IP67 rating on the switch panel
- Built-in resettable fuses

Specifications	SP-0900
Max current	10A per channel, 35A total
Touch Panel Dimensions	70(L) x 63(W) x 1(H)mm
Membrane Control Box Dimensions	135(L) x 90(W) x 33(H)mm

↑	Voltage	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	6x10A	SP-0900	\$99.95	\$89.95	\$79.95



RELAYS

AUTOMOTIVE RELAYS

MICRO 30A HORN RELAYS

Extremely compact with a footprint of only 22 x 15mm, but maintaining high contact currents for automotive applications. Ideal for air horns, fog lamps or driving light installations. 30A rating on NO contacts, 20A on NC for both 12V and 24V types.

NOT JUST FOR HORNS OF COURSE

↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	30A	SPST	SY-4045	\$6.50	\$5.75	\$4.95
	12VDC	30A	SPDT	SY-4046	\$6.50	\$5.75	\$4.95
	24VDC	30A	SPDT	SY-4047	\$6.50	\$5.75	\$4.95

AUTOMOTIVE FUSED RELAYS - 15/30A

Designed for automotive applications, these quality relays have an integrated blade fuse (fuse included) and metal mounting bracket. SY-4076 - 15A, ideal for aftermarket horns etc. SY-4077 - 30A, suits high current accessories like fog lights, driving lights etc.

- QC tab termination 6.8mm (PT-4507)

↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	15A	SPST	SY-4076	\$8.95	\$7.95	\$6.95
	12VDC	30A	SPST	SY-4077	\$9.95	\$8.75	\$7.75

AUTOMOTIVE HORN RELAY - 30A

Whilst designed for auto horns, this relay is ideal for any high current application. i.e. alarms, ignition cutout, transmitters, car spotlights etc. Contact voltage (nom) 12VDC. Nominal coil voltage 12VDC. QC tab termination

Also see our PCB mount version Cat. SY-4072 shown on page 119.

↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	30A	SPST	SY-4068	\$5.95	\$5.25	\$4.75
	12VDC	30A	SPDT	SY-4070	\$5.95	\$5.25	\$4.75
	Base to Suit			SY-4069	\$4.95	\$4.45	\$3.90

AUTOMOTIVE HORN RELAY - 60A SPDT

- Contact voltage (nom) 12VDC
- Nominal coil voltage 12VDC.
- QC tab termination
- SPDT
- Heavy duty quick connectors required for 60A terminals use PT-4717 Pkt. 4

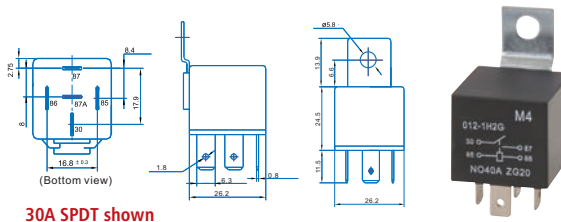
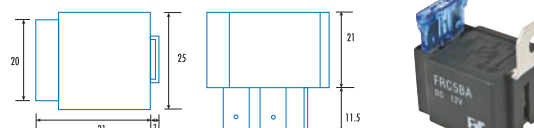
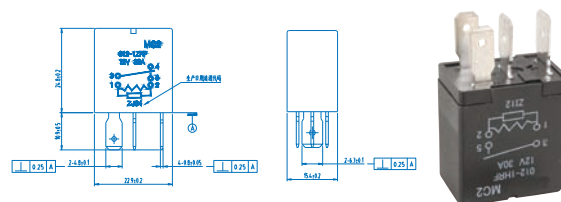
↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	60A	SPDT	SY-4074	\$8.95	\$7.95	\$6.95

AUTOMOTIVE RELAY - 150A SPDT

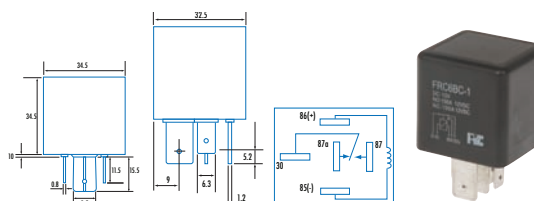
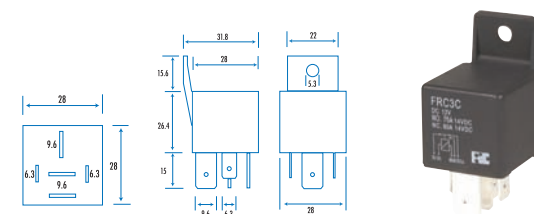
150A contacts for ultra high power applications such as multiple lights, high power audio etc, in a small package.

- Contacts: SPDT
- Contact rating: 150A
- Coil resistance: 50 ohms
- Operate time: 10ms
- Operational life: 100,000 cycles
- Contact resistance: 30m ohm max
- Coil voltage: 12VDC
- Rated coil current: 240mA
- Release time: 5ms

↑	Voltage	Current	Contacts	Cat.	Qty 1+	Qty 10+	Qty 25+
	12VDC	150A	SPDT	SY-4073	\$14.95	\$13.35	\$11.70



30A SPDT shown



LET'S BUILD

LET'S FIND EVERYTHING YOU NEED!

AUTOMOTIVE RELAY BASE TO SUIT ABOVE HORN RELAYS

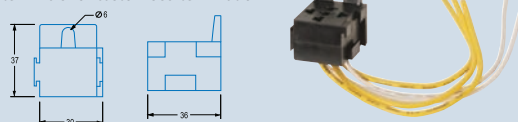
This is a plug in base with cable attached.

- Suits SY-4068 & SY-4070

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SY-4069	\$4.95	\$4.45	\$3.90

INTERLOCKING RELAY SOCKET WITH LEADS

The easy and neat way to add multiple relays to your electrical system. These relay bases interlock together, can be panel mounted and take standard 5 pin automotive relays. They also come with integral flying leads as well as bare crimp terminals for customised termination.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SY-4078	\$8.50	\$7.50	\$6.75

UNIVERSAL RELAY WIRING KIT WITH SWITCH

A universal relay wiring kit for fitting various 12V devices to your car, such as our LED driving lights SL-3920/SL-3922. It is a complete "ready to use" harness with fused battery connections, horn relay, in-cabin toggle switch, and waterproof 2 pin connection with 2m of extra wires to connect to the 12V load you want to control.

The cables are fully protected inside a loom tube.

It also includes a short "double adaptor" lead so that you can fit two or more of these wiring harnesses and control them with the one switch - for example if you want to control a pair of SL-3920 LED driving lights.

- Max current rating: 7A (80W)

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SY-4079	\$33.95	\$29.45	\$26.45



ABS PROJECT BOXES

ABS ENCLOSURES

JIFFY BOXES

Manufactured from ABS plastic, these jiffy boxes not only look great, they have been designed to incorporate everything our customers wanted in a constructor's box. Sizes are compliant with industry standards externally and PCB fitting internally.



- Impervious, dimple-free finish provides good adhesion for screen printing
- Lids feature a 5mm grid of 'centre punch' type points on the underside for quick and accurate drilling
- Lids also feature a 10mm grid of scribed lines providing an easy and precise guide for cutting or filing cut-outs
- PCB guides in the sides of the box have snap-in locators. Eliminates the need for stand-off hardware when mounting boards horizontally
- Box also has a grid of 'centre punch' type points on the base of the inside
- Supplied with lid fixing screws and safety concealment plugs

Size	External (mm)		To Fit PCB (mm)	
	Dimensions		Vertical	Horizontal
UB1	158 x 95 x 53		89 x 48	134 x 88
UB2	197 x 113 x 63		105 x 57	172 x 104
UB3	130 x 68 x 44		63 x 39	107 x 62
UB5	83 x 54 x 31		50 x 27	62 x 49

↑		Cat	Qty 1 +	Qty 4 +	Qty 10 +
UB1	Black	HB-6011	\$4.45	\$3.95	\$3.45
UB2	Black	HB-6012	\$6.95	\$6.25	\$5.50
UB3	Black	HB-6013	\$3.95	\$3.45	\$3.15
UB3	Grey	HB-6023	\$3.95	\$3.45	\$3.15
UB5	Black	HB-6015	\$2.95	\$2.60	\$2.30
UB5	Grey	HB-6025	\$2.95	\$2.60	\$2.30
UB5	Clear	HB-6005	\$2.95	\$2.60	\$2.30

BLUE (TRANSLUCENT IMAC® LOOK)

↑		Cat	Qty 1 +	Qty 4 +	Qty 10 +
UB5	Blue	HB-6004	\$3.45	\$3.05	\$2.75

FLANGED ABS LIDS VERSION OF JIFFY BOXES

These professional enclosures are identical to the UB3 & UB5 jiffy boxes, except they feature flanged lids for bulkhead/surface mounting. The exclusive moulded Jaycar drilling template on the inside of the lid is included, as are the screw hole plugs to hide the lid screws. Refer to the jiffy box information on the left for full detail on the drilling template. Ideal for automotive, security, audio/video plus a wide variety of other applications.



- Lid moulded, drill assist pilot holes on a 5 & 10mm pitch
- Four hole plugs to improve finish
- Moulded in ABS plastic
- Exclusive to Jaycar.

↑		Cat.	Qty 1 +	Qty 4 +	Qty 10 +
UB3	Black	HB-6014	\$4.45	\$3.95	\$3.45
UB5	Black	HB-6016	\$2.95	\$2.60	\$2.30
UB3	Grey	HB-6024	\$4.45	\$3.95	\$3.45

ABS ENCLOSURES WITH SNAP-IN HINGED LID

Versatile ABS plastic enclosures with self-locking construction that provides easy opening and closing of the enclosure without use of additional tools. The rubber cable entry/exit also means you don't need to get the drill out in order to run cabling from the box.

- Four internal moulded standoffs allow you mount a PCB horizontally
- Available in light grey and black colours, and made from high strength ABS plastic
- Full specifications see website

External dimensions (excluding flange):
 HB-6431 & HB-6433 - 91(L) x 79(W) x 45(H)mm
 HB-6432 & HB-6434 - 91(L) x 122(W) x 69(H)mm

↑	Colour	Type	L(mm)	W(mm)	H(mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	Grey	1-Way Cable Entry	91	79	45	HB-6431	\$5.95	\$5.50	\$4.75
	Black	1-Way Cable Entry	91	79	45	HB-6433	\$5.95	\$5.50	\$4.75
	Grey	2-Way Cable Entry	91	122	69	HB-6432	\$7.95	\$6.95	\$6.25
	Black	2-Way Cable Entry	91	122	69	HB-6434	\$7.95	\$6.95	\$6.25

IP54 HIGH QUALITY POLYSTYRENE ENCLOSURES

This range includes a small flat case that is ideal for remote control transmitters, up to a case that is ideal for bench test equipment, and the best thing is that they are not expensive. All are supplied with removeable front and rear panels which are light grey in colour, with the rest of the case dark grey. They are moulded in ABS, conform to IP54 and IEC529 and NEMA4 with respect to moisture and dust proof sealing and flame retardant to UL94-V0. Guide slots are provided for vertical mounting of PCBs, and spacers are moulded in for horizontal mounting. All but the smallest two have M3 screws and brass inserts to hold top and bottom together.

DARK GREY ABS - FLAME RETARDANT TO UL94

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
90	50	16	HB-6030	\$4.95	\$4.45	\$3.90
90	50	24	HB-6031	\$5.95	\$5.25	\$4.75
120	60	30	HB-6032	\$7.95	\$6.95	\$6.25
150	80	30	HB-6034	\$12.95	\$11.35	\$10.35
190	100	40	HB-6036	\$18.95	\$16.95	\$14.95

ABS & METAL ENCLOSURES

ABS ENCLOSURES (CONTINUED)

PLASTIC INSTRUMENT CASE

- Modern design case in matt finish surface.
- Ideal for desktop instruments.
- Top and base is in grey, with dark grey front and rear panels.
- Moulded in high impact ABS plastic UL-94-HB
- Includes 4 pcs screws and rubber feet

LIGHT GREY - DARK GREY END PANELS

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
95	158	47	HB-5922	\$9.95	\$8.75	\$7.75



MINI ABS INSTRUMENT CASE

The case is made from high impact ABS plastic and features adhesive rubber feet and removable front & rear plastic panels.

- Exclusive to Jaycar
- An ideal enclosure for AV projects, automotive, test gear, etc.

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
130	90	35	HB-5960	\$6.95	\$6.25	\$5.50



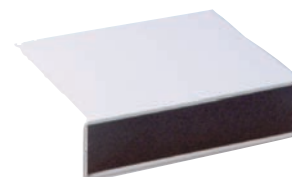
HIGH IMPACT ABS INSTRUMENT CASE

This top quality case is ideally suited for instrumentation, telecommunication, or just to make your projects look fabulous.

- Removeable ABS front and rear panels
- Top and bottom have a tongue and groove joint and are lightly textured which offers a non-scratch surface & keeps the high quality finish
- Guide slots provided for vertical mounting of PCBs
- Bosses are provided for horizontal mounting of PCBs
- Screws supplied to secure lid to base

GREY ABS - UL94HB

W (mm)	D (mm)	H (mm)	End Panels	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
140	110	35	Black	HB-5970	\$5.95	\$5.25	\$4.75



PRO QUALITY INSTRUMENT CASES

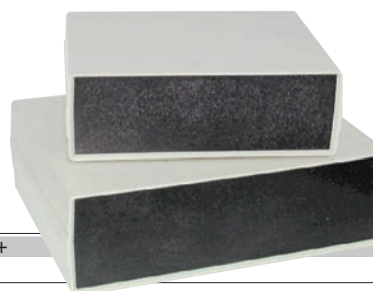
Our superb instrument cases will give your projects the professional appearance they deserve.

- Internal mounting posts enable a wide combination of PCB's, transformers, etc., to be accommodated
- PCB guide rails provided internally allow vertical PCB positioning to several locations
- Removable front and rear panels, attractive textured finish one side and plain the other. (Enables direct engraving, silk screen printing etc., to plain side)
- Top and bottom split apart for ease of construction or service. Feet included
- Great for test instruments and other high grade projects

Available in 2 sizes

SMALL - NON VENTED

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
200	160	70	HB-5912	\$14.95	\$13.35	\$11.70



LARGE - VENTED CASE

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
260	190	80	HB-5910	\$18.95	\$16.95	\$14.95

METAL INSTRUMENT CASES

METAL ENCLOSURES

Aluminium cases finished in grey with black finish steel cover. Ventilated and supplied with rubber feet.

SEE OUR RANGE OF KNOBS ON PAGE 84



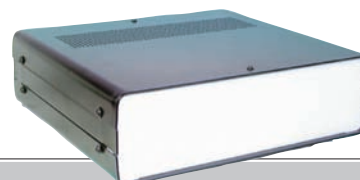
W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
102	150	61	HB-5442	\$13.95	\$12.35	\$10.95
160	184	70	HB-5446	\$19.95	\$17.70	\$15.70

PROFESSIONAL BENCH ENCLOSURE

This cabinet has pre-punched ventilation holes, metal thread fastening screws, aluminium pre-painted front and rear panels, up to the minute styling and facilities to mount internal hardware without recourse to drilling lids. Apart from this, the enclosure features cabinet heights that comply with standard IEC297 rack heights. Even though it is not a rack cabinet many components (especially transformers) are made to comply to these height dimensions.

- Grey in colour.

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
304	279	88	HB-5556	\$49.95	\$44.90	\$39.90



ABS PROJECT BOXES

ABS ENCLOSURES (CONTINUED)

BULKHEAD ABS MOUNT CASES

4 cases in the range. The two smaller sizes have moulded in square cable entries on each end, and holes for screws/bolts to mount the case.

- Colour is black.
- The two larger cases have a moulded bracket at each end with a screw hole for easy mounting.

HB-6075

The base snaps into place, and there is a round 10mm dia hole in one side for cable entry.

HB-6080

The base mounts with 4 self tapping screws.

HB-6081

The base mounts to case with 4 self tapping screws included.

HB-6082

This case has mounting brackets at each end that are easily removable if you do not wish to mount the case.

It has a clear plastic front/top plate that allows you to view the contents of the box.

This plate is screwed on from the base/back and cannot easily be removed from the front.

- Colour: Black and Clear

BLACK - HIGH IMPACT ABS

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
65	38	27	HB-6065	\$2.65	\$2.30	\$2.07
72	44	28	HB-6068	\$2.95	\$2.60	\$2.30
88	69	33	HB-6075	\$3.75	\$3.30	\$2.95
112	67	36	HB-6080	\$5.75	\$4.95	\$4.60

EXTRA DEEP BULKHEAD ABS MOUNT CASES

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
72	50	63	HB-6081	\$6.95	\$6.25	\$5.50

BULKHEAD MOUNT CASE WITH CLEAR FRONT / TOP

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
120	70	30	HB-6082	\$9.95	\$8.75	\$7.75

SNAP FIT ABS ENCLOSURES - BLACK

A range of black ABS enclosures with side flanges allowing wall, or even ceiling mount. Snap fit design locks together to enclose your circuit board or project inside.

- Material: ABS
- Colour: Black
- Wall mount holes: 2 x 4.5mm Dia.
- Internal holes: 4 x 2.6mm x 6mm

Cat.	Dimensions (Internal)	Dimensions (External)
HB-6006	45.44(W) x 45.84(D) x 18.0(H)mm	70.4(W) x 50.5(D) x 27.0(H)mm
HB-6007	65.44(W) x 45.84(D) x 33.0(H)mm	90.4(W) x 50.5(D) x 42.0(H)mm
HB-6008	75.44(W) x 76.04(D) x 33.5(H)mm	100.6(W) x 80.7(D) x 43.5(H)mm
HB-6009	100.44(W) x 66.04(D) x 41.1(H)mm	127.0(W) x 70.7(D) x 50.5(H)mm

W(mm)	D(mm)	H(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
70.4	50.5	27.0	HB-6006	\$3.95	\$3.55	\$3.15
90.4	50.5	42.0	HB-6007	\$4.95	\$4.45	\$4.00
100.6	80.7	43.5	HB-6008	\$5.95	\$5.25	\$4.75
127.0	70.7	50.5	HB-6009	\$5.95	\$5.25	\$4.75

ENCLOSURE POTTING BOX

- Protect your electronic assemblies against shock, temperature, humidity and chemicals
- Moulded in high impact ABS plastic
- Black in colour
- Flammability rating: UL-94HB

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
39	39	27	HB-5202	\$1.50	\$1.35	\$1.20
45	30	25	HB-5200	\$1.00	\$0.90	\$0.80
70	50	20	HB-5204	\$2.95	\$2.60	\$2.30

REMOTE CONTROL CASE

This case is ideal for a TV/VCR remote control. The case includes a battery compartment with sliding cover. It will accept either 2 x AA batteries or a 9V. The terminals for the AA batteries are included. The transmitting end of the box is supplied with 2 plastic panels, one the colour of the box, the other a red perspex for use with Infrared LEDs.

*Includes Battery Contact Kit & Translucent Panel

BLACK - HIGH IMPACT ABS UL94V0

W(mm)	D(mm)	H(mm)	Flame Retard	Cat.	Qty 1+	Qty 10+	Qty 20+
135	70	24	No	HB-5610	\$6.95	\$6.25	\$5.50

KEYFOB REMOTE CONTROL CASE

Includes the case and hardware, which consists of pushbutton knobs, battery terminals, LED cover and keyring.

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+
32	50	10	HB-5605	\$1.95

3 PIN PLUG PACK CASE

Make your own plug in power supplies with our vented case. Complete with earth pin!

W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
55	47	95	HB-5900	\$5.95	\$5.25	\$4.75

POLY & DIECAST METAL ENCLOSURES

ABS ENCLOSURES (CONTINUED)

IP65 SEALED ABS ENCLOSURES

- Made with ABS Material
- Moulded in dark grey
- Operating temperature: -20 to +80C
- Bosses on internal base allow fixing of PCBs horizontally, or connection of terminals etc.
- The lid and base incorporate a tongue and groove sealing system with a neoprene gasket
- Lid fixing screws are M-4 stainless steel (non-magnetic) into threaded brass inserts
- Wall mounting holes and lid fixing screws are outside the sealing area thus preventing the ingress of moisture and dust
- Some sizes also available with external flange to allow mounting after the box has been sealed
- Designed to IP65 of IEC529 and NEMS 4 (dust and hose proof)
- Internal guide slots for mounting PCB assemblies vertically (Not on HB-6120 or HB-6134)

↑	Colour	W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	Dark Grey	64	58	35	HB-6120	\$5.95	\$5.25	\$4.75
	Dark Grey	64	58	35	Flange HB-6121	\$6.95	\$6.25	\$5.50
	Dark Grey	115	65	40	HB-6122	\$8.95	\$7.95	\$6.95
	Dark Grey	115	65	40	Flange HB-6123	\$9.95	\$8.75	\$7.75
	Dark Grey	115	65	55	HB-6124	\$9.95	\$8.75	\$7.75
	Dark Grey	115	65	55	Flange HB-6138	\$10.95	\$9.75	\$8.75
	Dark Grey	115	90	55	HB-6126	\$12.95	\$11.35	\$10.35
	Dark Grey	115	90	55	Flange HB-6127	\$14.95	\$13.35	\$11.70
	Dark Grey	171	121	55	Flange HB-6125	\$19.95	\$17.70	\$15.70
	Dark Grey	171	121	55	HB-6128	\$17.95	\$15.95	\$14.35
	Dark Grey	171	121	80	HB-6129	\$21.95	\$19.70	\$17.35
	Dark Grey	222	146	55	HB-6130	\$24.95	\$22.35	\$19.70
	Dark Grey	222	146	75	HB-6132	\$28.95	\$25.95	\$22.95
	Dark Grey	240	160	90	HB-6134	\$37.95	\$33.95	\$30.45



POLYCARBONATE & POLYSTYRENE ENCLOSURES

IP65 SEALED POLYCARBONATE ENCLOSURES

- Made with Polycarbonate material - moulded in light grey.
- Operating temperature: -40 to +125C
- The lid and base incorporate a tongue and groove sealing system with a neoprene gasket
- Lid fixing screws are M-4 stainless steel (non-magnetic) into threaded brass inserts
- Wall mounting holes and lid fixing screws are outside the sealing area thus preventing the ingress of moisture and dust
- Designed to IP65 of IEC 529 and NEMA 4 (dust and hose proof)
- Internal guide slots for mounting PCB assemblies vertically (not on HB-6230)

LIGHT GREY

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
82	80	55	HB-6230	\$12.95	\$11.35	\$10.35
115	65	40	HB-6212	\$13.95	\$12.35	\$10.95
115	90	55	HB-6216	\$14.95	\$13.35	\$11.70
171	121	55	HB-6218	\$19.95	\$17.70	\$15.70
171	121	80	HB-6224	\$23.95	\$21.35	\$18.95
222	146	55	HB-6220	\$29.95	\$26.90	\$23.70



LIGHT GREY WITH CLEAR LID

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
171	121	55	HB-6248	\$23.95	\$21.35	\$18.95



LIGHT GREY WITH MOUNTING FLANGE

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
64	58	35	HB-6211	\$9.95	\$8.75	\$7.75
115	65	40	HB-6213	\$12.95	\$11.35	\$10.35
115	90	55	HB-6217	\$16.95	\$14.95	\$13.35
171	121	55	HB-6219	\$21.95	\$19.70	\$17.35
171	121	80	HB-6221	\$25.95	\$23.35	\$20.70



LIGHT GREY WITH CLEAR LID WITH MOUNTING FLANGE

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
115	65	40	HB-6249	\$14.95	\$13.35	\$11.70
115	90	55	HB-6251	\$17.95	\$15.95	\$14.35
115	121	80	HB-6223	\$28.95	\$25.95	\$22.95

METAL ENCLOSURES - DIECAST

ECONOMY DIECAST ALUMINUM BOXES

- Excellent screening properties for EMI and RFI
- Ideal for projects subject to weather
- Made from 380 Die-cast aluminium alloy (BS1490 LM24)
- Ideal for instruments, meter cases, filter networks etc
- Robust, light weight/easy to machine
- Ideal for projects involving heat as the case itself makes an excellent heatsink
- Close fitting flanged lids

W (mm)	D (mm)	H (mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
51	51	32	HB-5060	\$7.95	\$6.95	\$6.25
111	60	30	HB-5062	\$9.95	\$8.75	\$7.75
111	60	54	HB-5063	\$12.95	\$11.35	\$10.35
119	94	34	HB-5067	\$14.95	\$13.35	\$11.70
119	94	57	HB-5064	\$18.95	\$16.95	\$14.95



DIECAST & 19" RACK MOUNT ENCLOSURES

METAL ENCLOSURES - DIECAST (CONTINUED)

IP65 SEALED DIECAST ALUMINIUM BOXES

This range of boxes compare in quality to those English and Canadian ones that are VERY expensive. These are ideal for housing electronic assemblies, pneumatic, hydraulic & electrical devices for commercial & industrial environments. Provides effective shielding of EMI and RFI.

- Aluminium diecast - resistant to atmospheric and marine corrosion
- Designed to IP65 of IEC529 and NEMA4 (dust and hoseproof)
- Wall mounting holes and lid fixing screws are outside the sealing area
- The lid incorporates a recessed neoprene gasket
- Bosses on internal base for fixing PCBs horizontally or connection of earth grounding, etc
- Internal guide slots for mounting PCB assemblies vertically
- Screw holes for lid mounting are roll threaded
- Captive, recessed lid screws
- Heat rating up to 400°C

Manufacturers and bulk users - contact Jaycar for bulk pricing.

Specifications	
Wall thickness	3.4 +/-0.1mm
Box and lid	aluminium alloy ADC-10 to Japan Industrial Standard (JIS) in natural state
Gasket	neoprene, resistant to oil and petrol
Lid screws	M4 stainless steel (non magnetic)
Ground screw and washer, copper plated.	

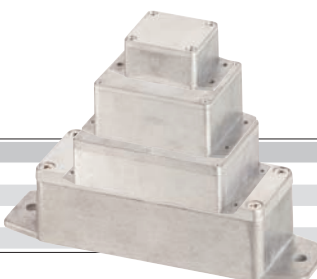
W (mm)	D (mm)	H (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
64	58	35	HB-5030	\$9.95	\$8.75	\$7.75
115	65	30	HB-5036	\$14.95	\$13.35	\$11.70
115	65	55	HB-5040	\$18.95	\$16.95	\$14.95
115	90	55	HB-5042	\$21.95	\$19.70	\$17.35
171	121	55	HB-5046	\$34.95	\$31.45	\$27.90
222	146	55	HB-5050	\$36.95	\$33.45	\$29.45



IP65 SEALED DIECAST ALUMINIUM BOXES - FLANGED MOUNT

Sealed aluminium enclosures for external use are provided with flanges and holes for wall mounting. Lid fixing bolts are located outside the sealing area to ensure better sealing. Made from aluminium alloy ADC-10 (JIS) and provides protection against dust and moisture (IP65). Features racks and guides for mounting a PCB horizontally or vertically.

W(mm)	D(mm)	H(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
90	36	30	HB-5029	\$10.95	\$9.75	\$8.75
64	58	35	HB-5031	\$11.95	\$10.70	\$9.50
115	90	55	HB-5044	\$23.95	\$21.35	\$18.95
171	121	55	HB-5041	\$36.95	\$33.45	\$29.45



19" RACK MOUNT CABINETS & PANELS

PRO GRADE 19" RACK STYLE EQUIPMENT ENCLOSURES

Complies with IEC 297 / EIA RS-310 C-1977 / DIN 41494 standards. Each cabinet is made from phosphated steel and coated with a dark grey enamel. The colour matched rack front panel is in 3mm aluminium with extruded handles (excluding 1U). The rear panel is aluminium as well. The top, bottom and sides of each cabinet are liberally punched with ventilation holes.

All screw fasteners are metal thread - not self tappers. Top, bottom, front and rear of enclosure can be separately removed without affecting the integrity of the cabinet. Each enclosure comes with punched internal rail bars to facilitate PCB, transformer, filter capacitor etc, mounting independent of cover panels. Each cabinet also features an internal sub panel (in 1.5mm enamelled aluminium) which is adjustable from 0-20mm from the back of the front panel. This panel is ideal for mounting panel hardware (no screws need appear on front panel). Rear panel is also adjustable 0-20mm inwards. The entire cabinet is packed flat for convenient transport. Rubber mounting feet are provided.

Dimensions(mm)	1U	2U	3U
Panel height	44	88	133
Cabinet height	39	84	128
Cabinet depth	245	335	335
Width	482.6	482.6	482.6

	Cat.	Qty 1+	Qty 4+	Qty 10+
1 unit enclosure	HB-5120	\$69.95	\$62.95	\$55.95
2 unit enclosure	HB-5125	\$109.00	\$97.95	\$86.95
3 unit enclosure	HB-5130	\$129.00	\$115.95	\$102.95



RACK CABINET PANELS

Quality brushed anodised panels with a black finish

Finish	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
Black	44mm 1U	HB-5404	\$16.95	\$14.95	\$13.35
Black	88mm 2U	HB-5405	\$24.95	\$22.35	\$19.70
Black	132mm 3U	HB-5406	\$29.95	\$26.90	\$23.70



19" RACK BLANK PANELS

Blank panels for filling in unused space or configuring panels to your own requirements. Black powder coated steel, 1or 2 unit, vented or plain. The vented panels are also useful at the back of rack enclosures for attaching wiring looms to.

1U BLANK

- Dimensions: 483(W) x 45(H)mm

Cat HB-5420

2U BLANK

- Dimensions: 483(W) x 89(H)mm

Cat HB-5422

1U BLANK VENTED

Cat HB-5424

2U BLANK VENTED

Cat HB-5426

	Cat.	Qty 1+	Qty 4+	Qty 10+
1U Blank Panel	HB-5420	\$10.50	\$9.25	\$8.25
2U Blank Panel	HB-5422	\$12.95	\$11.35	\$10.35
1U Vented Blank Panel	HB-5424	\$18.95	\$16.95	\$14.95
2U Vented Blank Panel	HB-5426	\$27.95	\$24.95	\$22.35



19" RACK MOUNT CABINETS & ACCESSORIES

19" RACK MOUNT CABINETS & ACCESSORIES



19" RACK MOUNT CABINETS

Ideal for studios, PA, sound reinforcement, IT, or phone systems installations, with a size and configuration to suit any application. Coupled with our wide range of accessories and options, these 19" rack cabinets offer outstanding features. All come in 1.8mm solid steel powder coated cabinets with clear tempered glass doors. The sides can be removed for installation or maintenance access and all panels are key-lockable.

- High strength and rigidity under load
- Contemporary design
- Lift off side panels
- Top or bottom cable entry
- Cooling fan hole
- Camlock closures
- Front, sides and back lock separately
- Wall mounting without brackets
- Static loading capacity 60kg

6U

Available flat packed or assembled
Dimensions: 530(W) x 360(H) x 450(D)mm
Flat Packed: Cat HB-5170
Assembled: Cat HB-5171

12U

Dimensions: 530(W) x 626(H) x 450(D)mm
Cat HB-5174



SWING FRAME RACK MOUNT ENCLOSURE

Swing frame enclosures allow you to access the rear of your rack system for maintenance or easier installation. Tempered glass doors and locking panels all round. 6 or 12 unit enclosures available.

6U

• Dimensions: 600(W) x 380(H) x 610(D)mm
Cat HB-5180

12U

• Dimensions: 600(W) x 630(H) x 610(D)mm
Cat HB-5182

	Cat.	Qty 1+	Qty 4+	Qty 10+
6U Rack Mount - Flatpacked	HB-5170	\$159.00	\$142.95	\$126.95
6U Rack Mount - Assembled	HB-5171	\$189.00	\$169.95	\$150.95
12U Rack Mount - Flatpacked	HB-5174	\$229.00	\$209.00	\$182.95
6U Swing Frame Rack Mount	HB-5180	\$229.00	\$209.00	\$182.95
12U Swing Frame Rack Mount	HB-5182	\$299.00	\$269.00	\$239.00

RACK PANEL ACCESSORIES

A range of accessories to complete your rack system - blank panels for filling in space, vent panels and panels for fans or mic sockets, braked castors and feet for keeping it all where you want it. Panels are black powder coated steel, 1, 2 or 3 unit.

1U 12 X XLR SOCKET PANEL

• Dimensions: 483(W) x 45(H)mm
Cat HB-5436

3U 3 X FAN PANEL

• Dimensions: 483(W) x 133(H)mm
• Suits 120mm fans
Cat HB-5438

UNIVERSAL BRAKED CASTORS

- Ball bearing swivel castors
- universal mounting plate
- Suitable for rack cabinets, speaker boxes, etc.
- Sold as a set of 4
- Mount plate: 70(L) x 55(W)mm
- Wheel: 50(Dia) x 30(W)mm
- Overall Height: 75mm
- Cat HB-5470

UNIVERSAL ENCLOSURE FEET

- Adjustable height
- M12 threaded shaft
- Supplied with locking nut
- Sold as a set of 4
- Suitable for rack cabinets, speaker boxes, etc.
- Dimensions: 60(H) x 50(Dia.)mm
- Cat HB-5472



	Cat.	Qty 1+	Qty 4+	Qty 10+
1U XLR Socket Panel	HB-5436	\$12.95	\$11.35	\$10.35
3U Fan Panel	HB-5438	\$19.95	\$17.70	\$15.70
Braked Castors - Set of 4	HB-5470	\$29.95	\$26.90	\$23.70
Adjustable Feet - Set of 4	HB-5472	\$19.95	\$17.70	\$15.70

PATCH LEAD MANAGEMENT PANEL

Keeps all your patch leads under control.

- 1U size.
- Removable cover plate

	Cat.	Qty 1+	Qty 4+	Qty 10+
Dimensions: 483(W) x 45(H) x 68(D)mm	HB-5434	\$29.95	\$26.90	\$23.70

RACK MOUNT CAT 5E/6 PATCH PANELS

Sleek attractive looking rack mount 24 port patch panel with a hard metal exterior. Numbered ports and a labelling area for each port. Also comes with instruction stickers on the back for easier cabling. See our tool section for punch-down tools.

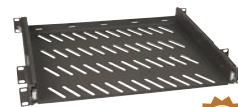
- Takes up 1 rack unit
- 24 port
- Numbered ports
- Labelling area
- Cat.5e or Cat6



	Cat.	Qty 1+	Qty 4+	Qty 10+
24 Port - Cat 5e Panel	YN-8046	\$49.95	\$44.90	\$39.90
24 Port - Cat 6 Panel	YN-8048	\$69.95	\$62.95	\$55.95

BALL BEARING SLIDING RACK SHELF

Ideal for mounting computer keyboards or other equipment that needs to be accessed easily. The slides have ball bearing runners for smooth operation & will take a load of 20kg.
• Dimensions: 483(W) x 52(H) x 350(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-5450	\$99.95	\$89.95	\$79.95

FIXED 19" RACK SHELVES

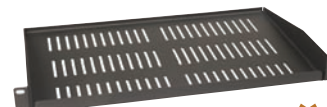
Ideal for tuners, CD players, amplifiers or any other equipment that you want to include in your rack but doesn't have rack-mounting ears. Each shelf is punched with ample slots for ventilation and a folded return front and rear to take loads of up to 20kg. Solid steel construction, black powder coated finish.

1U FIXED RACK SHELF

• 483(W) x 45(H) x 305(D)mm
Cat HB-5452

2U FIXED RACK SHELF

• 483(W) x 89(H) x 380(D)mm
Cat HB-5454



	Cat.	Qty 1+	Qty 4+	Qty 10+
1U Fixed Rack Shelf	HB-5452	\$49.00	\$43.95	\$38.95
2U Fixed Rack Shelf	HB-5454	\$69.00	\$61.95	\$54.95

RACK CABLE SUPPORTS

Takes the pain out of wiring and fault-finding rack cabinets. Your cables are kept organised and neat, with the support also providing strain relief.

1U

• Dimensions: 483(W) x 45(H) x 62(D)mm
Cat HB-5430

2U

• Dimensions: 483(W) x 89(H) x 82(D)mm Cat HB-5432



	Cat.	Qty 1+	Qty 4+	Qty 10+
1U Rack Cable Support	HB-5430	\$24.95	\$22.35	\$19.70
2U Rack Cable Support	HB-5432	\$29.95	\$26.90	\$23.70

DIN RAIL & ENCLOSURE MOUNTS

DIN RAIL

Metal DIN rail, standard size for mounting power supplies, relays, terminals etc. 1 metre length.



ENCLOSURE MOUNTS FOR DIN RAIL

Makes mounting standard enclosures onto standard DIN rails easy. Supplied as a pair with self tapping screws.



	Cat.	Qty 1+	Qty 4+	Qty 10+
DIN Rail - 1 metre	HM-3092	\$12.95	\$11.35	\$10.35
Enclosure Mounts for DIN Rail	HM-3094	\$9.95	\$8.75	\$7.75

LET'S POINT YOU TO THE RIGHT PAGE...

Workbench Equipment - Tools, Test & Soldering

TOOLS & CASES		TEST & MEASUREMENT		SOLDERING & SERVICE AIDS	
Cable Tools	133	Clamp Meters	155	Adhesives & Tape	216
Cutters & Pliers	131	Digital Multimeters	148	Aerosols	29
Crimpers	133	Digital Scales	165	Gas Torches	176
Drill Bits & Sets	143	Digital Thermometers	161	Magnifiers	144
Electric Screwdrivers & Drills	137	Function Generator	160	PCB Prototypes	27
Screwdrivers	138	Oscilloscopes	158	Solder & Accessories	172
Tool Boxes / Cases	129	Panel Meters	168	Soldering Irons	172
Tool Kits	140	Sound Level Meters	163	Soldering Stations	170
Ultrasonic Cleaners	145	Specialist Meters & Testers	163	Stands & Safety	172
Watchmaker Tools	146	USB Inspection Cameras	167	Anti-static Product	142

ABS INSTRUMENT CASES WITH PURGE VALVES

These robust cases come with purge valves for an airtight seal, ribbed ABS construction, stainless steel hinge pins, O-ring seals and very solid catches. The lids are lined with removable egg-shell foam and they come with pluck foam insert with an extra layer of egg-shell foam. Ideal for your camera gear, test, medical or scientific equipment.

ABS INSTRUMENT CASE MPV0
Ideal for professionals to carry around small sensitive devices including computer, medical, or engineering equipment. Features extremely strong catches with metal pins, it's sealed with a rubber gasket, and inside is pluck foam to shape the internal storage space for a specific object.

• Lanyard included
Cat. HB-6389



ABS INSTRUMENT CASE MPV1
Tiny size for small instruments or test equipment.
Cat. HB-6388



ABS INSTRUMENT CASE MPV2
Small size for a single SLR camera, DMM or other test equipment.
Cat. HB-6381



ABS INSTRUMENT CASE MPV4
Medium size to take extra camera and lenses or larger gear such as oscilloscopes or multiple pieces of test equipment.
Cat. HB-6383



ABS INSTRUMENT CASE MPV7
Large size. This case also has moulded slots to take dividers and two layers of pluck foam. It's also deep enough to take a pro SLR camera body.
Cat. HB-6385



ABS INSTRUMENT ROLLING CASE MPV8
Ideal for the travelling professional. Like a conventional piece of luggage, it has a retractable handle and built-in wheels to take the load. It's also carry-on size.
Cat. HB-6387



↑	Internal - W(mm) x D(mm) x H(mm)	External - W(mm) x D(mm) x H(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
MPV0	164 x 119 x 40	173 x 125 x 50	HB-6389	\$24.95	\$22.35	\$19.70
MPV1	186 x 123 x 75	210 x 135 x 90	HB-6388	\$34.95	\$31.45	\$27.90
MPV2	300 x 220 x 90	330 x 280 x 120	HB-6381	\$59.95	\$53.95	\$47.90
MPV4	395 x 320 x 117	430 x 380 x 154	HB-6383	\$89.95	\$80.95	\$71.95
MPV7	485 x 355 x 186	515 x 415 x 200	HB-6385	\$119.00	\$106.95	\$94.95
MPV8	510 x 292 x 175	530 x 355 x 225	HB-6387	\$175.00	\$157.95	\$139.95

TOOLS & STORAGE CASES

TOOL CASES & BOXES

MULTI-STORAGE TOOL CASE

Make up your own tool kits? Our computer service tool kits are supplied in these cases. They are made from vinyl and have a zipper to keep them closed. Inside, there is a number of elastic loops to hold the tools in place.

- 17 loops



↑	W(mm) x D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	220 x 320 when open	HB-6390	\$9.95	\$8.75	\$7.75

ALUMINIUM ATTACHÉ CASE

High quality, all silver case, supplied with tool pallet, which can be removed if not required. Lid includes a document holder and the padded case includes 5 dividers that can be rearranged or removed. Lockable and includes two keys.



↑	W(mm) x D(mm) x (H)mm	Cat.	Qty 1+	Qty 4+	Qty 10+
	450 x 320 x 145	HB-6352	\$59.95	\$53.95	\$47.90

FOAM INSERT ALUMINIUM ATTACHÉ CASES

Ideal for Camera, Video and Test Equipment, these cases feature removable 15mm square foam pieces so you can make a hole to the exact size of your valuable equipment. The lid also has a foam insert for complete protection. Cases are lockable and supplied with two keys. Great for wine and glasses also.



↑	W(mm) x D(mm) x H(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Small	407 x 277 x 95	HB-6355	\$39.95	\$35.90	\$31.90
Large	450 x 320 x 145	HB-6356	\$69.95	\$62.95	\$55.95

WATERPROOF ENCLOSURES

IP66 INDUSTRIAL ABS ENCLOSURES

Gasket seals, stainless steel hardware and IP66 rated for use in industrial, marine and other harsh environments. The closures have a locking catch that engages to positively hold the lid closed until disengaged. Each enclosure includes a 1.8mm galvanised chassis for mounting DIN rail, switchgear, relays or circuit breakers. A size for any application.

- Dimensions: HB-6404: 200(L) x 200(D) x 130(H)mm
HB-6412: 175(L) x 125(D) x 75(H)mm



↑	Cover	Cat.	Qty 1+	Qty 4+	Qty 10+
	Opaque	HB-6404	\$29.95	\$26.90	\$23.70
	Transparent	HB-6412	\$29.95	\$26.90	\$23.70

TOOL & INSTRUMENT CASES

IPX8 WATERPROOF ABS CASES

Black waterproof ABS cases for storing or transporting just about anything including Smartphones, radios, wallets, delicate electronic devices and more. They are fully protected from water, dust, and sludge thanks to a gasket seal and powerful latches. The insides are lined with a layer of protective foam to insulate against bumps and knocks. Bring one on your next camping trip and keep those valuables protected.

- Lanyard included
- Waterproof
- Shockproof

3 models to choose from



↑	Size	L(mm)	W(mm)	(H)mm	Cat.	Qty 1+	Qty 4+	Qty 10+
	Small	182	120	42	HB-6421	\$19.95	\$17.70	\$15.70
	Medium	182	120	75	HB-6423	\$24.95	\$22.35	\$19.70
	Large	210	120	90	HB-6425	\$34.95	\$31.45	\$27.90

4 TRAY TOOL/STORAGE CASE

On-site storage of parts, tools, fishing tackle or anything else you need to tote around. Each compartment has a 233 x 122 x 32mm 13 compartment storage box for small items with dividers that can be removed to accommodate larger things. All the hinges and catches are the durable pintle type, not a flimsy bit of folded plastic that will snap after a week. The top tray has a generous 265 x 160 x 65 space for ancillary items and it's finished in a tasteful shade of industrial yellow and black.

- Dimensions: 270(W) x 260(H) x 150(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6302	\$19.95	\$17.70	\$15.70

LOOKING FOR STORAGE CASES?

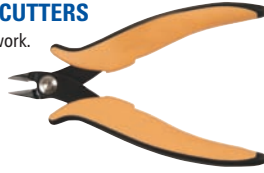
IDEAL FOR CARRYING SMALL COMPONENTS. SEE THROUGH PLASTIC CONSTRUCTION ENABLES THE CONTENTS TO BE EASILY IDENTIFIED. SEE PAGE 178 FOR OUR RANGE.



SIDE CUTTERS

127MM - PRECISION ANGLED SIDE CUTTERS

Precision side cutters that are ideal for fine PCB work. They will easily cut leads flush with the board's surface. The cutters are made from quality tool steel and have soft padded handles that are spring loaded for comfortable long term use.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1897	\$11.95	\$10.70	\$9.50

115MM - STAINLESS STEEL SIDE CUTTERS

High quality small side cutters that have thick (2mm) blades and comfort soft plastic handles which are spring loaded.

- 115mm long



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1890	\$13.95	\$12.35	\$10.95

110MM - FUJIYA PRECISION SIDE CUTTERS

Beautifully engineered side cutters for the discerning tradesman. These cutters feature high quality tool steel construction and are perfect for cutting super fine wire as well as general workshop use. They aren't just good to look at, they are tough as well and can cut steel wire up to 1.6mm without harm. The insulated handles are spring loaded for effortless use.

- 110mm long
- Blade hardness: Rockwell C Scale 57~61
- Soft grip handle



Japanese Made

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2332	\$29.95	\$27.95	\$23.70

135MM - ESD SAFE SIDE CUTTERS

Specifically for ESD work. High quality Japanese designed, Italian manufactured cutters especially for static-sensitive applications.

- 135mm long



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1922	\$29.95	\$26.90	\$23.70

150MM - CARBON STEEL PRECISION SIDE CUTTERS

These cutters are made from the same high carbon steel as our TH-1885 long nose pliers and are designed for sharp cutting in precision wiring. They have insulated soft-touch handles and a coil return spring for fatigue free use.



Japanese Made

ENGINEER®



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1891	\$34.95	\$32.90	\$27.90

CUTTERS & PLIERS SET

STAINLESS CUTTER / PLIERS SET

Set of five 115mm cutters and pliers for electronics, hobbies, beading or other crafts. Stainless steel with soft ergonomic grips.

Contents:

- Flush cutters
- Long nose pliers
- Flat nose pliers
- Bent nose pliers
- Round nose pliers



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1812	\$29.95	\$27.95	\$23.70

LONG NOSE PLIERS

150MM - PRECISION LONG NOSE PLIERS

Precision, slim line long nose pliers that are ideal for working in confined areas. They have serrated jaws so you can get a firm grip on the item you're holding. The pliers are made from quality tool steel and have soft padded handles that are spring loaded for comfortable long term use.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1887	\$11.95	\$10.70	\$9.50

TECH TALK!

To avoid confusion we have put a small logo "SS" nominating which tool is made out of "stainless". "CS" means carbon steel.

145MM - STAINLESS STEEL LONG NOSE PLIERS

The partner to our TH-1890 stainless steel cutters. These have half round smooth gripping jaws perfect for adjusting and bending components, picking up that dropped nut, etc. Comfortable soft plastic handles which are spring loaded.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1893	\$13.95	\$12.35	\$10.95

110MM - FUJIYA PRECISION LONG NOSE PLIERS

These are the perfect companion for our TH-2332 precision side cutters and are made to the same exacting specifications. The insulated handles are spring loaded for effortless use.

- 110mm long
- Blade hardness: Rockwell C Scale 53~57
- Soft grip handle



Japanese Made

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2334	\$29.95	\$27.95	\$23.70

125MM - CARBON STEEL PRECISION LONG NOSE PLIERS

These quality pliers are made in Japan from the same high carbon steel that is used to make professional chef's knives. The pliers feature serrated jaws and a box joint to provide a precise action and strong grip. The coil spring ensures smooth, fatigue-free use. Insulated soft touch handles.



Japanese Made

ENGINEER®



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1885	\$34.95	\$31.45	\$27.90

TECH TALK!

WHEN STAINLESS STEEL IS NOT THE BEST

We are big fans of stainless steel. We love it in tools, fasteners & many building products. It is not, however, always the best material. Top chefs will tell you, for example that the best knives are not stainless. They are made out of carbon steel.

Why?

Carbon steel is far harder & tougher than stainless. The problem of course is that carbon steel will rust if not maintained. In our search for the best hand-tools we have decided to stock two very high quality Japanese-made products made out of carbon - steel. They are not cheap but they are for the professional user whose time is money. Like carbon steel knives, rust is not a problem if used constantly.

They will, however, pay you back every day because they will stand up to heavy wear & tear. For those who have only occasional use for hand tools, we sincerely recommend stainless steel products.

PLIERS & CUTTERS

160MM (6") SIDE CUTTERS - INSULATED

This drop forged alloy tool is made to the same standards as our TH-1984 combination pliers. It is just as tough and will also cut piano wire up to 1.6mm. This is a quality tool and designed for dedicated wire cutting. It has comfortable double inset handles.



- 160mm/6" long.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1985	\$19.95	\$17.70	\$15.70

170MM (6.5") LONG NOSE PLIERS - INSULATED

You can see the quality German design in these strong and attractive pliers. They are drop forged to the same standards as the other tools in the range and have the same cutting capacity - up to 4.0mm electrical wire. A very attractive tool with comfortable handles. The high quality manufacture means they can take the work and last for ages. This could be the last pair of long nose general purpose pliers you need to buy!



- 170mm / 6.5" long.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1986	\$19.95	\$17.70	\$15.70

180MM (7") COMBINATION PLIERS

Strong, Tough & Reliable. These high quality drop forged alloy steel pliers are a professional tool and manufactured to the rigid German DIN standards for electrical safety & mechanical strength. They are for serious tradesmen who need a quality tool. These pliers will cut hard (piano wire) wire up to 1.6mm & soft (annealed copper, aluminium silver etc.) up to 4.0mm. Non slip double inset handles are comfortable to hold.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1984	\$22.95	\$20.35	\$18.35

SPECIALTY PLIERS

175MM - SCREW REMOVING PLIERS

This tool is basically designed to remove, by brute force, a hopelessly stripped out head of any type of small non-countersunk screw. The secret is an oval-shaped serrated hole in the end of the plier. You place the plier over the head of the screw, grip and rotate the plier. This system applies a lot more torque to the head of the screw than a drill bit ever could. It's reminiscent of the plier that a dentist used to extract your tooth!! Its Japanese manufacturer has provided a beautifully made and finished product. Suitable for any screw in the range of 2.0 to 5.0mm or so, although it will work on larger screws to lesser effect.

- 175mm long
- Soft grip handle



Japanese Made

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2330	\$24.95	\$23.35	\$19.70

75MM (3") SHEET METAL BENDING PLIERS

Bend sheet metal easily with this heavy duty offset hand tool. Features strengthened rivets and dual layered pitted handle for a firm grip.

- Jaw width: 75mm
- Jaw depth: 30mm
- Overall length: 210mm
- Thin gauge aluminium, brass, etc. ok. Not suitable for steel over 0.8mm thick.



75mm

SEE OUR SPOT
FACE CUTTER ON
PAGE 27

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2336	\$24.95	\$22.35	\$19.70

OTHER TOOLS

INSPECTION MIRROR

Low cost inspection mirror. Ideal for looking into hard to get places. Length: 160mm, mirror diameter: 24mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1872	\$4.95	\$4.45	\$3.90

FORCEPS (HAEMOSTATS)

These clamps are made of stainless steel and can be locked on to the item they are holding. They are 130mm long, so they are ideal to reach into hard-to-get-at places. Also great for holding components etc., whilst soldering.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1755	\$8.95	\$7.95	\$6.95

STETHOSCOPE

Listen for mechanical noises in equipment

- A very handy diagnostic tool with plenty of non-medical uses



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7255	\$14.95	\$13.35	\$11.70

12 IN 1 MULTI-FUNCTION TOOL WITH CARRY POUCH

Includes a file, bottle/can opener, saw, scissors, small and large knife, 3 sized standard screwdrivers, a Phillips head screwdriver, long nose pliers and an LED torch. Complete with a nylon pouch and a snap button loop for easy attachment to additional gear, the 12 in 1 Multi-Function Tool is a must have for any explorer.



- Dimensions: 99(L) x 43(W) x 18(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1926	\$29.95	\$26.90	\$23.70

CABLE STAPLE GUN

CABLE STAPLE GUN

Take the pain out of cable installation. Instead of trying to pound away with a hammer, simply staple the cable to eaves, rafters or joists. The staples have an integral plastic cable clamp that holds the cable firmly in place. The gun takes a variety of staples sizes to accommodate cables up to 8.0mm diameter.

CABLE STAPLE GUN 4 - 8MM Cat. TH-2610

- Includes gun, 2 interchangeable blades and 200 staples.

CABLE STAPLES REFILL 4 - 6MM PK 200

Cat. TH-2611

- Round cable: 4 - 6mm
- Flat cable: 2.5 - 4.0mm high and <8.0mm wide
- Suits: RG58, RG59, Cat5/6, Alarm Cable, Flat telephone cable, 10A T&E, Extra HD Fig8

CABLE STAPLES REFILL 6 - 8MM PK 200

Cat. TH-2612

- Round cable: 6 - 8mm
- Flat cable: 4.5 - 6.3 high and <10.3mm wide
- Suits: RG6Q, RG8, 8GA, 10A Mains Flex, Jumbo Fig8



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Cable Gun	TH-2610	\$19.95	\$17.70	\$15.70
Refill Staples 4-6mm	Pkt 200 TH-2611	\$9.95	\$8.75	\$7.75
Refill Staples 6-8mm	Pkt 200 TH-2612	\$9.95	\$8.75	\$7.75

LET'S FIND EVERYTHING YOU NEED!

PROFESSIONAL LEATHER TOOL UTILITY BELT

Strap this to your waist to keep your most used tools on you at all times. The belt size is fully adjustable and features a number of pockets and 2 leather loops suitable for carrying a hammer, measuring tape and more.

- Features:
- 2 large main pockets
 - 2 front stitched pockets
 - 6 small pockets
 - 2 leather hammer loops
 - Adjustable web belt with buckle

Note: Tools and accessories not included



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6373	\$19.95	\$17.70	\$15.70

CRIMPING TOOLS - QUICK CONNECTORS

5 WAY CRIMPING TOOL - AUTO TYPE

This crimping tool will do the following:

- Cut wire
- Crimp insulated & non insulated terminals
- Strip wire with diameters 0.75, 1.0, 1.5, 2.5, 4.0 & 6.0mm
- Cut bolts with diameter M2.6, M3.0, M3.5, M4.0 & M5.0



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1828	\$8.95	\$7.95	\$6.95

CRIMPING TOOL FOR NON-INSULATED LUGS

A quality tool at a budget price. Solid box joint and crimping dies, comfortable handles and spring-loading make this an easy crimper to use all day. It handles non-insulated lugs from 14-18 AWG and 22-26 AWG and also includes a built-in wire cutter.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
185mm long	TH-1834	\$14.95	\$13.35	\$11.70

AUTOMOTIVE CRIMP TOOL WITH CONNECTORS

Unlike other automotive crimp pliers, this excellent tool comes with 80 of the most popular automotive connectors and NOT a bunch of junk you will never use. The tool will cut & strip wire, crimp connectors and also cut a range of metric bolts. Every car enthusiast should have one of these.

Included connectors:

- 8 each of male & female blue bullets
- 8 each of male & female red bullets
- 8 each of male & female blue spades
- 8 each of male & female red spades
- 8 x red eye connectors
- 8 x blue butt joiners



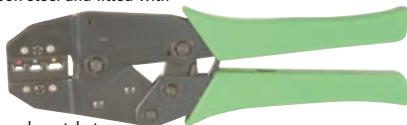
SEE PAGE 181 FOR OUR FULL RANGE OF TERMINALS

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1848	\$13.95	\$12.35	\$10.95

HEAVY DUTY RATCHET CRIMP TOOL FOR INSULATED TERMINALS

Manufactured from quality carbon steel and fitted with hardened and tempered jaws.

Features a chemically blackened finish for improved corrosion resistance and heavy duty PVC handles to provide operator comfort. Crimping pressure is precisely adjustable and a ratchet release lever is fitted to enhance safety. Has easy identification for crimping Red, Blue, and Yellow Terminals. Suitable for crimping insulated terminals from 0.5mm to 6.0mm in size.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
220mm	TH-1829	\$39.95	\$35.90	\$31.90

CRIMPING TOOLS - COAX

COMPRESSION CRIMPING TOOL - UNIVERSAL

A precision crimp tool ensuring correct crimping pressure is applied for reliable, trouble-free compression of BNC, RCA, Min-F and F-type coaxial connectors. Adjustable compression depth that provides desired crimping length.

- Works with RG59 and RG6 coaxial cables.

Note: This tool is not suitable for our PP-0708 Foxtel Approved F59 Plug



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
146mm long	TH-1800	\$24.95	\$22.35	\$19.70

COMPRESSION CRIMPING TOOL FOR F-TYPE PLUGS

A compact compression tool designed for our Foxtel approved F-type plug (PP-0708). A channel accurately positions the plug, and a spring-loaded clamp holds the cable in position. These features and leverage action of the handle ensure easy F-type compression crimps can be performed quickly and easily time after time.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
143mm long	TH-1803	\$29.95	\$26.90	\$23.70

HEAVY DUTY COAX CRIMPING TOOL

This tool is specifically designed for crimping F, N, BNC, TNC, UHF, ST, SC & SMA connectors onto coax cable for TV and communications applications. It also has adjustable crimp force and 3 hex dies: 2.54mm, 9.12mm & 10.3mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1832	\$29.95	\$26.90	\$23.70

HEX RATCHET CRIMPING TOOL

Heavy duty ratchet tool designed for crimping F, N, BNC, TNC, UHF, ST, SC & SMA connectors onto RG6, RG58 or RG59 coax cable. It features adjustable crimping force and ratchet mechanism for complete repeatability. Four hex crimping dies: 1.72mm, 5.49mm, 8.23mm and 9.14mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1833	\$39.95	\$35.90	\$31.90

RATCHET CRIMPING TOOL FOR F-TYPE CONNECTORS

A strong, heavy duty tool for crimping F-Type CATV connectors onto RG6 or RG59 coax cable. Ideal for cable TV or RF distributions system installers. The tool features a secure ratchet mechanism for accurate and reliable crimps.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1831	\$39.95	\$35.90	\$31.90

RATCHET CRIMPING TOOL FOR BNC/TNC CONNECTORS

A heavy duty tool for crimping BNC/TNC connectors onto RG58/59/62 coax cable. The tool features a secure ratchet mechanism for accurate and reliable crimps.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1846	\$39.95	\$35.90	\$31.90

HEAVY DUTY TERMINAL CRIMPER

Commonly used for crimping lug/eye terminals onto heavy gauge power cables. The lever arm action makes for a good solid hex crimp on the terminal. Features a built in rotating die which can be rotated to suit terminals for 6/10/16/25/35/50mm² cable (10AWG-1/0AWG).

- Suitable for use with our PT-4934 to PT-4939 range of eye terminals.
- 450mm long.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1849	\$49.95	\$44.90	\$39.90

SEE PAGE 204 FOR F TYPE CRIMP PLUGS

LET'S FIND EVERYTHING YOU NEED!

F CONNECTOR SEATING TOOL

This 3 way tool assists in the connection of F type connectors. Includes flaring tool for RG6 and RG59 cable and pre-threading tool. Measures: 60mm diameter



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Suits RG6/RG59	TH-1883	\$11.95	\$10.70	\$9.50

CRIMPING & TERMINATION TOOLS

CRIMPING TOOLS (CONTINUED)

HEAVY DUTY CRIMP TOOL WITH QUICK INTERCHANGEABLE DIES

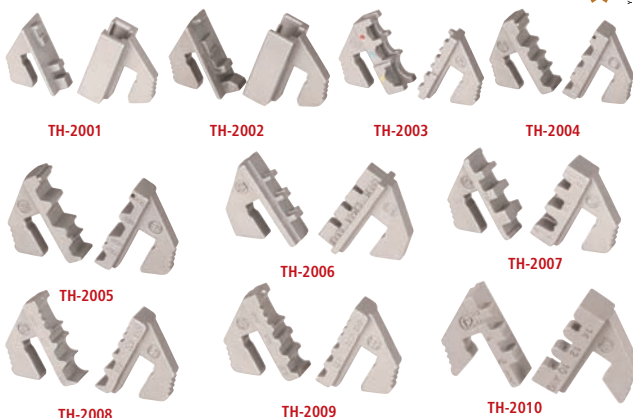
This heavy duty, ergonomic crimper allows you to quickly interchange the dies by hand, without the need for a screwdriver! Crimping is made easy with its ratchet mechanism designed for maximum power or quick release. Its ratchet release function allows for easy adjustment prior to completing the crimp, in case of incorrectly placed terminal.

This crimper uses interchangeable dies (available separately) that can be quickly and easily changed. Buy only the ones you require for each job! Dies available for telephone and network plugs, insulated terminals, BNC/TNC connectors to suit RG58/RG59/RG62 coax, and even F-type CATV connectors to suit RG59/RG6 coax. An invaluable tool for the workshop or technician's tool-kit.



SEE CAT5E & CAT6 CABLE ON PAGE 210.

DIES TO SUIT



↑	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Heavy Duty Crimp Tool	TH-2000	\$49.95	\$44.90	\$39.90
	6P6C RJ11/12	TH-2001	\$17.95	\$16.10	\$14.35
	8P8C RJ45	TH-2002	\$17.95	\$16.10	\$14.35
	Insulated Terminals	TH-2003	\$17.95	\$16.10	\$14.35
	BNC/TNC RG58/59/62	TH-2004	\$17.95	\$16.10	\$14.35
	F Connectors CATV RG6/59	TH-2005	\$17.95	\$16.10	\$14.35
	Non-Insulated Terminals 26-18AWG	TH-2006	\$17.95	\$16.10	\$14.35
	Non-Insulated Terminals 20-10AWG	TH-2007	\$17.95	\$16.10	\$14.35
	SMA/Fibre Optic 1.09-6.48mm	TH-2008	\$17.95	\$16.10	\$14.35
	SMA/Fibre Optic 1.07-4.52mm	TH-2009	\$17.95	\$16.10	\$14.35
	PV Connector NEW	TH-2010	\$24.95	\$22.50	\$19.95

CRIMPING TOOLS - MODULAR

6P/8P MODULAR CRIMP TOOL

This tool will crimp the following plugs: 6P2C, 6P4C - RJ12, 6P6C - RJ12, 8P - RJ45.

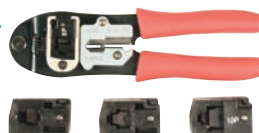
- It also cuts and strips the cable.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1935	\$19.95	\$17.70	\$15.70

4P/6P/8P/10P MODULAR CRIMP TOOL

This great tool will cut, strip and crimp flat telephone cable, or Cat5e type cable also. Constructed from high quality carbon steel, it features interchangeable dies and ergonomic design. It also has a brace to lock them closed.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1936	\$39.95	\$35.90	\$31.90

4P/6P/8P/10P MODULAR CRIMP TOOL WITH NETWORK/POE TESTER

A unique combination of a crimper tool and a cable tester in one unit. Designed for a wide range of telecom and network, security, and residential structured wiring, and professional applications. After crimping a modular connector, it enables you to quickly and easily test Ethernet twisted pair cable located on the handle of the tool for wiring continuity, opens, shorts, and mis-wires. With a single press on the TEST button, it will test the cable and gives the result of pin to pin configuration of the cables. The tester can also clip out of the housing and can be used as a general network tester.

The tool is steel framed with PVC handles and rust resistant black oxide finish. The device also includes a PoE (Power-over-Ethernet) finder to check if a voltage is present on a port or cable you are testing. Supplied with a carry pouch that can directly worn on your belt.

- Testing for both UTP and STP cable
- Testing cable for continuity, opens, shorts, mis-wires
- Pin to pin indication
- Single and multi-wired cable crimping
- Integrated cable stripper and cutter
- Crimping tool and cable tester in one
- Detachable cable tester



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1939	\$69.95	\$62.95	\$55.95

CAT5 TOOLS

CAT5 PUNCH-DOWN TOOL / STRIPPER

LOW-COST

This versatile little tool will strip wire up to 5 to 6.2mm diameter, and doubles as a punch-down tool for 110/88-type terminals, with blade.



Made from poly-resin plastic, with steel cutters this lightweight tool could easily fit in the pocket or tool kit.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1738	\$8.95	\$7.95	\$6.95

CAT5 PUNCH-DOWN TOOL - ADJUSTABLE

It has a turnable body, adjustable impact pressure and a storage compartment within the handle for holding a spare blade. Frame made of polyacetal resin with fibre glass orange handle. Supplied with 88 blade. Spare blades see TH-1743 below.

Specifications	
Impact pressure	Low: 10 +/- 2 kg (standard wire)
High	15 +/- 2kg (larger wire)
Length of tool	152mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1740	\$22.95	\$20.35	\$18.35

BLADES FOR CAT5 PUNCH TOOLS

Suits the punch tool - TH-1740. Made from hardened SNMCM-21, these blades are both changeable and reversible, and can be changed by hand, no screwdriver necessary. Blade retaining pressure within 4-6 kg. One end of each blade has a cutter for that extra-neat termination, the other end is plain for those "linked" blocks.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
110 Krone	TH-1743	\$17.95	\$15.95	\$14.35

LET'S FIND EVERYTHING YOU NEED!

FROM
\$5.95
YN-8015



WALL PLATES

P201

FROM
\$4.95
YN-8028



KEYSTONES

P201

FROM
\$39.95
WB-2023



CAT5E CABLE

P210

FROM
\$7.95
PP-1436



MODULAR PLUGS

P201

CABLE STRIPPERS & CUTTERS

BUDGET COAX CABLE STRIPPER

Strips insulation from any coax cable and ideal if you only need to strip coax occasionally. Simply insert the cable, twist and turn, then use the other end of the tool to remove the inner insulation.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1815	\$4.95	\$4.45	\$3.90

POCKET WIRE STRIPPER

Strips anything from 2G to RG6 coax. Easy to use and small enough to take anywhere on the job.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
120mm long	TH-1817	\$14.95	\$13.35	\$11.70

WIRE STRIPPER

Great way to strip all sorts of cable without damaging the conductors.

- Automatically adjusts to insulation diameter
- One hand operation.
- Spring return.

Features a Finger Guard



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1824	\$16.95	\$14.95	\$13.35

EASY COAX CABLE STRIPPER WITH F-TYPE SPANNER

Quickly and easily strip coax cable. There is a switch to adjust what thickness coax cable will be stripped. Just put the end of the cable in and it will be spring locked in place, then just twist and you will have successfully stripped the end of the cable. There's also an F-type spanner on the opposite side so you can tighten your connections.



- Dimensions: 150(L) x 50(W) x 10(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1813	\$19.95	\$17.70	\$15.70

ROTARY COAX STRIPPER

This handy stripper will strip the outside jacket and inner conductor in one operation.

- Suitable for RG58/59/62/6 and 3C2V 75 ohm cable.
- Simply rotate the stripper clockwise around the cable 3 to 6 times. A quality stripper suited to installers.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1820	\$19.95	\$17.70	\$15.70

STAINLESS STEEL WIRE STRIPPER / CUTTER / PLIERS

A high quality precision wire stripper and cutter that will strip wire sizes from 0.6mm to 2.6mm. It is spring-loaded with locking jaws, and has soft rubber handles for added comfort.

- Strips stranded wire from 12-24 AWG and solid wire from 10-22 AWG
- Includes wire cutter, pliers and loop hole to bend hooks in wires
- Will also cut steel wires up to 3.0mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
164mm long	TH-1841	\$15.95	\$14.35	\$12.70

HEAVY DUTY WIRE STRIPPER / CUTTER / CRIMPER WITH WIRE GUIDE

Designed for easy wire stripping. The alloy steel can strip all types of cable from AWG 10-24 gauge (0.13 - 6.0mm), and the wire guide ensures the correct length is stripped time and time again. It incorporates a precision cutting blade for easy wire cutting. It also features quality crimping jaws. Capable of removing outer insulation from main T & E cable

- Insulated terminals (1.5 - 6mm)
- Non-insulated terminals (1.5 - 6mm)
- For auto ignition terminals (7-8mm)
- This is the best all round wire tool we've seen for a long time
- Spring return



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
204mm long	TH-1827	\$29.95	\$26.90	\$23.70

SHEARS

180MM (7") HIGH QUALITY STAINLESS STEEL ELECTRICAL SHEARS

Slice through soft electrical cable with ease. These precision spring loaded stainless steel electrical shears will cut soft wire up to 22sqmm and make light work of cable ties, heatshrink, light hook-up wire and cable braid etc. The shears feature insulated handles and a convenient, thumb operated lock to keep them closed when not in use. Ideal for cutting ribbon cable



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
180mm long	TH-1757	\$7.95	\$6.95	\$6.25

140MM (5.5") HIGH QUALITY ELECTRICAL SHEARS

These shears offer impressive cutting ability with finely honed and serrated blades. Great for cutting insulation, heatshrink, spaghetti and light duty hook-up wire. These shears feature insulated handles.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
140mm long	TH-1758	\$6.95	\$6.25	\$5.50

165MM (6.5") STAINLESS STEEL CABLE SHEARS

This set of cutters has a cutting capability of up to 10mm cable. It is constructed from stainless steel and has a hardened long-life cutting edge. For safety and ease of storage, it can be locked in the closed position.

- Stainless Steel
- Lightweight
- Lockable.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
165mm long	TH-1898	\$19.95	\$17.70	\$15.70

300MM (12") COPPER CABLE SHEARS

These super heavy duty cutters feature a precision cutting head forged from carbon steel attached to drop forged steel handles for extra leverage. Designed to cut copper cable up to 35mm² you can slice through just about any cable up to 2 gauge. The handles are coated to prevent corrosion and have rubber grips for operator comfort.

- Dimensions: 310(L) x 90(W) x 40(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
310mm long	TH-1900	\$24.95	\$22.50	\$19.70

HAND LOTION

HAND PROTECTION LOTION

A unique lotion to keep your hands clean while you are at work. It protects your hands and body parts from dirt, grease, oil, ink and harsh contaminants. It also has anti-static properties to prevent ESD (electrostatic discharge) build-up, making it ideal for when working on ESD sensitive circuitry. To use simply wash your hands with soap and water, and then apply a small amount of Hand Protection Lotion to your hands, rub until it fully absorbed into the skin and wash your hands again with soap and water once the job is done.

Available in two sizes. Grab a bottle or two for your workshop, lab, office, art studio or home.

- Antistatic properties
- Moisturises skin
- Non-Greasy
- Does not impair grip



NEW 2015

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
59ml Pocket Sized Squeeze Bottle	NA-1200	\$12.95	\$11.35	\$10.35
354ml Hand-Pump Bottle	NA-1202	\$34.95	\$31.45	\$27.90

GLUE GUNS & ENGRAVING TOOLS

ROTARY TOOLS & ENGRAVERS

MICRO ENGRAVER

Engrave your valuables for security or insurance. The tiny diamond coated tip spins at 10,000 RPM so you can personalise tools, sporting gear, toys, security ID on valuables etc. Engraves glass, ceramics, metals and plastics. Batteries and case included.

- Tip is replaceable.
- Dimensions: 160(L) x 15(Dia)mm
- Replacement tip sold separately Cat TD-2469



	Cat.	Qty 1+	Qty 3+	Qty 6+
Micro Engraver	TD-2468	\$24.95	\$22.35	\$19.70
Spare Tip	TD-2469	\$6.95	\$6.50	\$5.50

110 PIECE 12V ROTARY TOOL SET

Drill, saw, sand, polish, carve or grind in your workshop or out on the road. 110+ bits and attachments cover every possible task you'll ever need. The rotary tool is rated for 12V at 12,000 RPM. Ideal for hobby or professional use.

- Rotary tool: 12VDC, 16W, 12,000 RPM
- Attachments:
 - 1 x Cloth wheel 1"x 1/8"
 - 2 x sanding shanks: 1/4"x1/2", 1/2"x1/2"
 - 4 x HSS Twist drills: 1.6mm x 2, 2.3mm x 2
 - 3 x Mandrels For Wheel
 - 5 x Diamond cutters
 - 2 x HSS cutter
 - 9 x Grinding wheels with Shank
 - 3 x Brush
 - 10 x Cutt off wheels
 - Heavy duty: 0.8mm
 - 20 x cut off wheels regular: 0.4mm
 - 1 x Polishing compound
 - 1 x mini engraver
- Sanding belts 3 x 6mm
- 5 x Sanding Bands: 1/4" x 1/2"
- 6 x Sanding bands: 1/2" x 1/2"
- 4 x Collets: 1.6mm-2.3mm-3.2x2
- 1 x Dressing Stone 1"x 3/8"
- 1 x Felt Wheel Pointed: 3/8" x 3/4"
- 2 x Rubber Emery Wheel
- 4 x Felt Wheels: 1/2" x 1/4"
- 20 x Sand papers
- 2 x Felt Wheels: 1"x1/4"



	Cat.	Qty 1+	Qty 3+	Qty 6+
12V 110 Piece Rotary Tool Set	TD-2451	\$34.95	\$31.45	\$27.90

210 PIECE ROTARY TOOL KIT WITH FLEXIBLE SHAFT

Flexible shafts are particularly useful for porting heads in engines, but have a multitude of other applications where you need to get into a tight space or get more control of the bit. The kit consists of a powerful mains powered 32,000 RPM rotary

tool that you can use with numerous attachments in the usual way, plus a 1m long flexible shaft. The flexible shaft attaches in seconds to give extra versatility. Suitable for modelmaking, automotive, workshop, art, jewellery or sculpture.

Attachments:

- Sanding arbours
- P80 sanding belts
- Sanding discs
- Collets: 2 x 3/32", 2 x 1/8"
- Drill bits: 2 x 1/16", 2 x 3/32"
- Grinding stones: 20 x 4mm wheel, 10 x 4mm wheel, 15 x 10mm cylinder, 12 x 10mm cylinder, 7 x 4mm cylinder, 20 x 10 bullet, 11 x 8mm tapered bullet,
- Tungsten carbide burrs: 3mm straight, ball profiles
- Diamond coated burrs: 4mm ball, 2mm fine cone taper, 3mm pinecone, 4mm cone
- Polishing wheels: 12, 25mm
- Steel, fibre wire brushes
- 30mm cut-off wheels
- 20 x 4mm grinding wheels
- Paint-removing wheel
- 3/8" collet spanner, arbours, shafts, polishing compound.



Rotary Tool	TD-2459
Speed	10,000 - 32,000 RPM
Power	135 Watts@240VAC
Size	210(L) x 52(Dia)mm
Shaft length	1000mm

	Cat.	Qty 1+	Qty 3+	Qty 6+
240VAC 210 Piece Rotary Tool Set	TD-2459	\$49.95	\$44.90	\$39.90

GLUE GUNS

MINI GLUE GUN - 30W

A glue gun is a handy tool to have around the house. It's fast, easy and simple to use with trigger controlled glue feed. Suitable for toys and models, decorations, furniture, woodwork, cardboard, etc.

- Mains powered
- Requires 7mm diameter glue sticks (2 supplied)

Note: For intermittent use only.
Not for production use



GLUE STICKS FOR MINI GUN

To suit the mini glue gun.
Dimensions: 7mm dia. x 100mm long
• Suits TH-1997 mini gun



	Cat.	Qty 1+	Qty 3+	Qty 6+
Mini 30W Glue Gun	TH-1997	\$12.95	\$11.35	\$10.35
Glue Sticks Pkt 6 for Mini Gun	TH-1991	\$3.95	\$3.45	\$3.15
Glue Sticks Pkt 50 for Mini Gun	TH-1994	\$9.95	\$8.75	\$7.75

LARGE GLUE GUN - 100W

Great for quick and easy low stress repairs to timber, cardboard, paper and many household materials. It is fast, easy and simple to use with trigger controlled glue feed.

- Mains powered
- Requires 12mm diameter glue sticks (2 supplied)
- Note: For intermittent use only.
Not for production use



GLUE STICKS FOR LARGE GUN

Dimensions: 12mm diameter x 100mm long.
• Suits TH-1999 gun

	Cat.	Qty 1+	Qty 3+	Qty 6+
Large 100W Glue Gun	TH-1999	\$14.95	\$13.35	\$11.70
Glue Sticks Pkt 6 for Large Gun	TH-1995	\$4.95	\$4.45	\$3.90
Glue Sticks Pkt 45 approx. for Large Gun	TH-1996	\$17.95	\$15.95	\$14.35

DRILL & ACCESSORIES

350W 240VAC ELECTRIC DRILL

A powerful 240V electric drill suitable a variety of tasks around the house or on the job. Features a forward/reverse switch, lock setting, and moulded plastic grip. You can also adjust the speed of the drill when the full power is not required. Will accommodate bits up to 10mm and includes a handy belt clip.

- Mains powered
- Cable length: 1.8m
- Dimensions: 250(L) x 190(H) x 65(D)mm



↑	Cat.	Qty 1+
	TD-2493	\$19.95

DRILL ASSISTANT WITH LASER LEVELLER

Drill holes in walls easily, on the level and with no mess. This drill assistant uses vacuum suction to attach to virtually any wall without leaving marks, and features float levels and a laser to ensure the hole you are about to drill is in the right position. There's even a compartment that captures the dust to avoid it falling to the floor.

- Vacuum Suction
- Built-in Laser
- Built-in Level
- Drill guide
- Dust catcher
- Requires 2 x AA batteries
- Dimensions: 238(L) x 100(W) x 48(H)mm



↑	Cat.	Qty 1+
	TD-2151	\$11.95

UNIVERSAL DRILL PRESS STAND

Convert your standard power drill or rotary tool into a drill press with this adjustable stand. Substantially cheaper than purchasing a full drill press, the stand still has all the necessary features expected in a full size press.

It includes separate adjustments for limiting press depth and drill height so you can change drill position with minimal risk of over-drilling into the stand. The drill collar can be adjusted to suit a variety of tools. Heavy duty cast metal base and frame provides excellent stability.

- Allen key supplied for tightening drill collar
- Drilling depth: Up to 60mm
- Maximum collar diameter: 43mm
- Minimum collar diameter with insert: 35mm
- Dimensions: 497(H) x 350(W) x 160(D)mm



Note: Drill not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2463	\$32.95	\$29.45	\$26.45

TAPE MEASURE

1M KEY CHAIN TAPE MEASURE

A handy retractable tape measure to take wherever you go. Durable yellow ABS body with a soft black rubber surround for comfort and grip. Small enough to keep in your pocket or clip to a set of keys.

- Measuring length: 1m
- Scale: Metric & Imperial
- Lockable
- Dimensions: 40(H) x 40(W) x 13(D)mm



NEW 2015



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2500	\$2.95	\$2.60	\$2.30

BENCH VICE

MINI BENCH VICE

This sturdy lightweight vice will clamp to surfaces up to 1" thick and hold material up to 2" thick. This handy tool is ideal for hobby work or as a light duty workshop bench vice. Made from strong, lightweight aluminium that won't rust or corrode, the vice will be a useful addition to anyone who needs a third hand!

- Vice jaws are 63.5mm wide and will open to more than 50mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1764	\$14.95	\$13.35	\$11.70

270° ROTATION CLAMP VICE

Rotate the head through 270° to make your work easier. The base will clamp to any bench or table up to 55mm thick and the 40mm jaws will take a job up to 58mm in size. Once in position, the head is easily fixed in position with a quick release lever.

- Base: 115(W) x 94(D)mm



SEE PAGE 132 FOR METAL BENDING PLIERS.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1769	\$24.95	\$22.35	\$19.70

VACUUM BENCH VICE - 75MM JAW

This quality vacuum vice is made from hard-wearing diecast aluminium. The vice consists of three-pieces; a vacuum base, ball joint clamp and a 75mm opening jaw with removable soft rubber jaw covers. The 'V' grooved jaws are ideal for holding cylindrical and irregular shapes, making it well suited to small bench jobs such as model building, jewellery making and general PCB/chassis work. The multi-positional ball swivel allows the jaws' working position to be varied through a full 360° axis.

- Stands approximately 160mm tall.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1766	\$29.95	\$26.90	\$23.70

VICE / BENDER

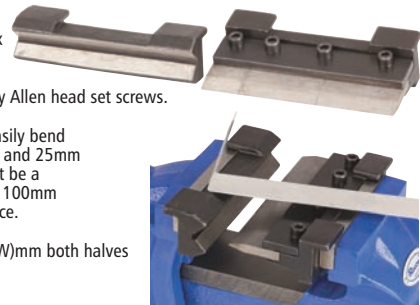
SHEET METAL BENDER - PAN BRAKE STYLE (VICE BREAK)

This unit sits in the jaws of your bench vice (100mm+ recommended). It retains itself in the vice with strong recessed magnets. One half consists of the familiar blade that bends the sheet metal. The other half in the 90 degree recess that the blade pushes into. By carefully positioning the sheet, you can perform a perfect 90 degree bend as good as a workshop! The blade is segmented, just like a workshop pan brake, so that you can make partial bends. With a little practice, you will be able to fabricate brackets, small boxes & other metal assemblies like a pro.

Warning: This unit is not particularly cheap. It is, however, very well made. It is cast steel with tool steel pressing components. You need it to be sturdy, otherwise it would break or flex. It will, literally, last a lifetime.

Will fold sheet up to 125 wide, however there are 3 x press segments 2 x 50mm, 1x25mm and these are independently removable by Allen head set screws. Depending on the width of the material you could easily bend steel strips up to 4mm thick and 25mm wide. Aluminium should not be a problem up to 4mm thick & 100mm wide, depending on your vice.

- Dimensions: 125(L) x 30(W)mm both halves



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1763	\$49.95	\$44.90	\$39.90

SCREWDRIVERS

SCREWDRIVERS

HIGH QUALITY JEWELLER'S SCREWDRIVERS

Each screwdriver has a rotating top, larger handle and a strong chrome vanadium tip providing a comfortable finger/palm rest and an easily turned body. These look very similar to those expensive German ones.



↑ Type	Cat.	Qty 1+	Qty 3+	Qty 6+
1.0mm Slot Tip	TD-2060	\$3.50	\$3.15	\$2.75
1.5mm Slot Tip	TD-2061	\$3.50	\$3.15	\$2.75
2.0mm Slot Tip	TD-2062	\$3.50	\$3.15	\$2.75
#000 Phillips	TD-2064	\$3.50	\$3.15	\$2.75
#00 Phillips	TD-2065	\$3.50	\$3.15	\$2.75

JEWELLER'S SCREWDRIVER SET

All metal precision screwdrivers for watchmakers, jewellers, modelmaking or just fixing the sunnies. Set of six.

- Slotted: 1.0, 1.2 & 1.6mm
- Phillips: #00, #0 & #1

SEE WATCH REPAIR KITS ON PAGE 146



↑ Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2023	\$9.95	\$8.75	\$7.75

6 PIECE INSULATED ELECTRONIC SCREWDRIVER SET

These screwdrivers have ergonomic handles with excellent non-slip grips. The shafts are fully insulated and rated for 1000V. The set contains all the smaller sizes you need for working on electronic gear. Storage case included.

- Slotted: 2mm, 2.5mm, 3mm
- Phillips: #00, #0, #1
- 1000V rated
- TUV and GS approved
- Case: 192(L) x 130(W) x 26(H)mm



↑ Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2026	\$19.95	\$17.70	\$15.70

ELECTRIC SCREWDRIVERS

ELECTRIC SCREWDRIVER - 18 BITS

A handy electric screwdriver for all those around the house jobs. Features a comfortable moulded grip, reverse and forward modes, and an LED for those hard to see spots. The drill has three adjustable configurations from the traditional gun style to a cylindrical shape for applying extra pressure on stubborn screws or bolts. Also comes with philips, flat, torx and hex bits suitable for most applications.

- Torque: 2.5Nm
- Voltage: 4.8V
- Drill time: 40 mins
- Included bits: Pozzi (P20, P21, P22, P23)
- Phillips (PH0, PH1, PH2, PH3)
- Torx (T10, T15, T20, T25)
- Hex (H3, H4)
- Bit Extender
- Mains charger included
- Dimensions: 270(L) x 45(W) x 37(D)mm



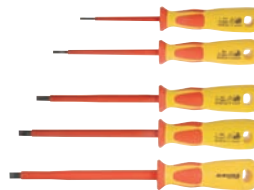
↑ Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2497	\$24.95	\$22.35	\$19.70

ELECTRICAL SCREWDRIVERS

This range of trade quality insulated screwdrivers is one of the most comfortable screwdrivers we have ever used. The ergonomic handles have a soft rubber coating for a secure, comfortable grip that you can use for hours on end. All are TUV and GS approved and rated up to 1kV.

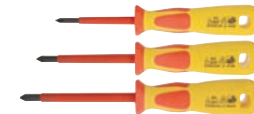
- A size for any application

SLOTTED



↑ Wmm	Lmm	Cat.	Qty 1+	Qty 3+	Qty 6+
2.4	75	TD-2230	\$5.50	\$4.90	\$4.30
3.0	100	TD-2231	\$5.95	\$5.25	\$4.75
5.5	125	TD-2232	\$6.95	\$6.25	\$5.50
6.5	150	TD-2233	\$7.95	\$7.10	\$6.25
8.0	175	TD-2234	\$9.95	\$8.75	\$7.75

PHILLIPS



↑ Size	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
0	60mm	TD-2235	\$5.95	\$5.25	\$4.75
1	80mm	TD-2236	\$6.50	\$5.75	\$5.15
2	100mm	TD-2237	\$6.95	\$6.25	\$5.50

1,000V 7 PIECE SCREWDRIVER SET

A quality set of 7 screwdrivers with storage box. GS & VDE tested & approved to 1000V. With red handles and insulation right to the tip.

- DIN EN 60900.

Flat:
1.2x6.5x150, 1.0x5.5x125,
0.8x4x100, 0.4x2.5x75

Phillips:
#2x100, #1x80, #0x75



↑ Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2022	\$29.95	\$26.90	\$23.70

102 PIECE ELECTRIC SCREWDRIVER KIT

Features a powerful high torque electric driver and a massive array of stainless steel bits that are sure to get the job done. All packaged in a tough aluminium carry case that will hold and protect your screwdriver, mains charger, and all the bits.

- Screwdriver dimensions:
144(L) x 135(H) x 40(W)mm
- Case dimensions:
250(L) x 153(H) x 88(D)mm



↑ Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2491	\$49.95	\$44.90	\$39.90

LET'S FIND EVERYTHING YOU NEED!

TOOL MAGNETISER / DEMAGNETISER

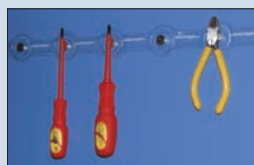
Magnetised screwdrivers make life easier. This tool has two slots, one which will magnetise and the other to demagnetise. The holes are large enough for the largest of screwdrivers.

- 50 x 50 x 30mm.



↑ Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2042	\$6.95	\$6.25	\$5.50

HANDY MAGNET STRIP



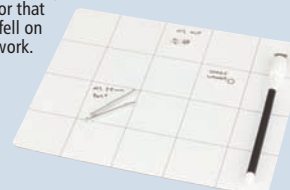
You'll find dozens of uses for this innovative magnetic storage system. It's simplicity itself and can be attached to walls, tables or other surfaces to hold tools, brushes, scissors, key rings or any other object that contains iron.

↑ Cat.	Qty 1+	Qty 6+	Qty 20+
LM-1624	\$19.95	\$17.70	\$15.70

MAGNETIC PROJECT WORK MAT

Holds small metal screws, nuts, and bolts so they don't roll off the desk as you work. No more hunting around for that small screw that fell on the floor as you work.

- Dimensions:
254(L) x
203(W)mm



↑ Cat.	Qty 1+	Qty 6+	Qty 20+
TH-1867	\$12.95	\$11.35	\$10.35

DRIVERS / DRIVER BITS

BLANK HEX DRIVER FOR INDIVIDUAL SCREW BITS

Use this driver with the bits supplied in our TD-2035 bit sets on the right. It will accept any hex bit in our range and features non-slip rubber handle with magnetic chrome vanadium 50mm long shaft.



Length	Cat.	Qty 1+	Qty 3+	Qty 6+
160mm	TD-2032	\$6.95	\$6.25	\$5.50

7 PIECE HEX NUT DRIVER SET

A useful set of hex nut drivers with deep sockets that allow a generous length of thread to protrude though the nut you are tightening. Sizes supplied are M3, M3.5, M4, M4.5, M5, M 5.5, and M6. A plastic storage pouch keeps the set together.

- A quality Japanese product.



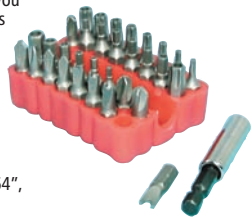
Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2339	\$26.95	\$23.95	\$21.35

THE POWER DRIVER BIT SET

The set consists of 32, yes 32 of the driver bits that you don't normally see. You don't get any slotted, Phillips or Pozidriv™ bits.

You do get:

- 4 x Tri - wing, size 1, 2, 3, and 4
- 9 x Torx (tamperproof), size T8, T10, T15, T20, T25, T27, T30 and T35
- 4 x Pin drive (snake), size 4, 6, 8 and 10
- 6 x In - Hex (allen), "metric, size 2, 2.5, 3, 4, 5 & 6
- 6 x In - Hex (allen), "imperial size 5/64", 3/32", 7/64", 1/8", 9/64" and 5/32"
- 3 x Torque Set, size 6, 8 and 10.



With this you get a hex driver with magnetic retainer, all in a nifty plastic - rubber holder that is smaller than a deck of cards! (67 x 45 x 30mm).

*Tamperproof Torx works as normal Torx as well.

*Tamperproof In - Hex drive type.



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2035	\$14.95	\$13.35	\$11.70

100 PIECE DRIVER BIT SET

The ultimate driver bit set includes:



- 1 x magnetic bit holder
- 1 x square to hex socket driver 50mm
- 1 x square to hex socket driver 25mm
- 1 x square to hex bit adaptor

Driver bits:

- Phillips # 0, 1, 2 (x5) & 3
- Pozidriv™ # 0, 1, 2 (x5) & 3
- Square drive # 0, 1, 2 & 3
- Slotted 3, 4, 4.5, 5, 5.5, 6, 6.5, 7 & 8mm
- Pin drive (snake) # 4, 6, 8 & 10
- Torque Set # 6, 8 & 10
- Torx T8, T10, T15, T20, T25, T27, T30, T40 & T45
- Tamper proof Torx (Metric) T8, T10, T15, T20, T25, T27 & T30
- Hex (Allen) Metric 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5, 6.0 & 8.0mm
- Tri-Wing # 1, 2, 3 & 4
- Clutch drive # 1, 2 & 3
- Hex (Allen) Imperial 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32 & 1/4"
- Spline drive M5, M6 & M8
- Tamper Proof Allen (Metric) 2.0, 2.5, 3, 4, 5 & 6mm
- Tamper Proof Allen (Imperial) 5/32, 9/64, 1/8, 7/64, 3/32 & 5/64"
- Wing nut driver,
- All in a snap lock case with clear markings to show where each bit rests.



High Impact S2 Steel

Note that commonly used driver bits are supplied in greater numbers.

Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2038	\$21.95	\$19.70	\$17.35

TEST SCREWDRIVERS

"SMART" TEST SCREWDRIVER

- Capacitor check
- Diode check
- Transistor check
- Globe/relay/fuse/speaker/resistor check
- Locating broken wire
- Picks up static radiation of TV or monitor
- Instantaneously checks AC power
- Earth disconnection check
- AC voltages



- DC voltage test up to 250V DC
- Continuity check
- Polarity check 1.5V to 36V DC
- Supplied with comprehensive instructions

Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2055	\$11.95	\$10.70	\$9.50

LOW VOLTAGE CIRCUIT TESTER 6, 12, 24 VOLTS

Looks like a neon test screwdriver but instead of a blade on the end this tester has a probe and a 28" lead which clips to ground.

- Suitable for 6/12/24 volts for use on cars, trucks, boats, etc.



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2049	\$3.95	\$3.45	\$3.15

PRECISION DRIVER SETS

5 PIECE TORX SET

Easy to use colour coded Torx screwdrivers in a plastic case. Each screwdriver has a swivel head for easy use.

Blade length is 20mm and torx sizes are T6, T7, T8, T9 & T10.



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2070	\$12.95	\$11.35	\$10.35

6 PIECE PRECISION TAMPERPROOF TORX SET

A quality set of chrome vanadium drivers consisting of T7, T8, T9, T10, T15 and T20.

All drivers are 145mm length & presented in a felt-lined plastic case.



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2021	\$19.95	\$17.70	\$15.70

KEYCASE MINI DRIVER SET

12 mini bits & driver in a key-sized storage case.

- Flat: 1.5, 2, 2.5mm
- Phillips: 0, 00, 000
- Torx: T5, T6, T7, T10
- T8H, Hex 2.5mm
- Case size: 95(H) x 60(W)mm



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2105	\$17.95	\$15.95	\$14.35

32 PIECE PRECISION DRIVER SET

High quality driver set with all those really small bits. Tactile handle with hardened hex shaft from 140 to 210mm. Ideal for jewellery, model making or electronics. Storage case included.

Slotted: 1, 1.5, 2, 2.5, 3, 3.5, 4mm
Phillips: 000, 00, 0, 1
Pozidriv: 0, 1
Torx: T4, T5, T6, T7, T8 T9, T10, T15, T20
Hex: 0.7, 0.9, 1.3, 1.5, 2, 2.5, 3, 4mm
Case: 157(L) x 100(W) x 27(D)mm



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2106	\$18.95	\$16.95	\$14.95

15 PIECE MICRO DRIVER SET

This handy set comes with all those microscopic fasteners we come across in modern electronics. The ergonomic handles are colour coded and they come in a sturdy storage case.

Slotted: 1mm, 1.4mm, 1.8mm, 2.4mm
Phillips: #000, #00, #0, #1
Torx: T5, T6, T7, T8
Hex: 1.5mm, 2mm, 2.5mm
Drivers: 105mm long
Case size: 192(L) x 130(W) x 26(H)mm



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2069	\$24.95	\$22.35	\$19.70

22 PIECE LONG BIT SCREWDRIVER SET

Tackle a wide range of fastening scenarios using our compact screwdriver set comprising a selection of popular slotted, Phillips, Star and TRI bits, packed away neatly inside a handy storage case.

Includes:

- Slotted: SL1.5, SL1.7, SL2.0, SL3.0 and SL4.0
- Phillips: PH000, PH00, PH0, PH1 and PH2
- Star: T5, T6, T7H, T8H, T9H, T10H, T15H and T20H
- TRI: 2.5, 3.0, 1.6 and 2.0



Cat.	Qty 1+	Qty 3+	Qty 6+
TD-2114	\$34.95	\$31.45	\$27.90

TOOL KITS

10 PIECE REINFORCED PLASTIC TOOL SET

A handy toolset that won't rust, so it's great for the toolbox, glovebox or tacklebox. Other benefits of these reinforced plastic tools include working on live (low voltage) circuits without chance of shorting if you slip, and preventing damage to the fasteners (screws & nuts) on your projects. You could even pack them in your cabin baggage if you travel. Supplied as a once piece mould - simply snap out the tools you need to use when you need them.

Package contains:

- Scraper
- Tweezers
- Spanner (M1.6/M2/M2.6/M3/M4)
- Grip (Driver) for attaching to the following:
 - No. 1 + Head x 1 (Phillips)
 - No. 2 + Head x 2 (Phillips)
 - No. 1 - Head x 1 (Slotted)
 - No. 2 - Head x 1 (Slotted)
 - M4 Hex Male Head
 - M4 Hex Female Head
 - M3 Hex Male Head
 - M3 Hex Female Head
 - M2.6 Hex Female Head
 - M2 Hex Female Head



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2116	\$4.95	\$4.45	\$4.00

30 PIECE TOOL KIT WITH CASE

Minor DIY repairs are a breeze with this 30 piece tool kit and every DIYer should have one of these in easy reach. The tools are held securely in a zip-up case.

Contents:

- Side cutters
- Long nose pliers
- Snap-blade knife
- Tape measure
- Precision screwdriver with bits
- Driver handle with: PH1, PH2, PZ1, PZ2, 5, 6mm slotted, T10, T15, T20
- 5, 6, 7, 8, 9, 10mm sockets
- Folding Allen keys 1.5, 2, 3, 4, 5, 6mm
- Case measures 210(L) x 160(W) x 48(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2166	\$26.95	\$23.95	\$21.35

35 PIECE ELECTRONIC TOOL KIT WITH VINYL CASE

A multi-purpose precision screwdriver tool set with a quality zipped storage case. The tool set consist of 30 bits, two cutters, two pliers and a flexible shaft adaptor for those tricky to reach screws. Ideal for electronic service tradesmen and hobbyists.

Kit includes:

- 30 pcs assorted bits:
 - Slotted: SL1.0, SL1.5, SL2.0, SL2.5, SL3.0, SL3.5, SL4.0mm
 - Phillips: PH000, PH00, PH0, PH1
 - Pozi: PZ0, PZ1
 - Torx: T4, T5, T6, T7, T8, T9, T10, T15, T20
 - Hex: H0.7, H0.9, H1.3, H1.5, H2.0, H2.5, H3.0, H4.0mm
- Needle nose pliers
- Diagonal cutters
- Flexible shaft
- Stainless tweezers
- Easy grip screwdriver handle
- Durable zippered storage case
- Case dimensions: 180(L) x 125(W) x 30(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2117	\$34.95	\$31.45	\$27.90

GAMING CONSOLE TOOL KIT

If you have ever attempted any repair or improvement on your gaming console, you know that the right tools can make the difference between a good experience and a bad one. Everything you need to get into your console and accessories. It includes tools for pretty much every console and handheld on the market today - Wii®, X-Box®, Playstation® etc. Carry case included.

Contents:

- PH000, PH00, PH0, PH1
- Slotted 2, 3, 4mm
- T4, T5, T6, T8, T10, T15, T20
- TA2, TA2.3
- TRI00, TRI0, TRI1
- Nintendo® & X-Box® security bits
- X-Box® opening tool
- Stainless tweezers
- Ratchet handle and adaptor



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2109	\$29.95	\$27.95	\$23.70

TOOL KITS FOR SMARTPHONES

TOOL SET REPAIR KIT FOR IPHONE®

The tools you need to safely open up your iPhone® or iPad® and put it back together again. Replace cracked screens, dead batteries, scratched back panels and more.

- Suits iPhone® 3G, 3GS, 4, 4s, 5.

Contents

- 3 x iPhone® mounting panels with screw hole marks for iPhone® 4, iPhone® 4s, iPhone® 5
- 1 x Scraping plastic film
- 1 x Special tool for capacitive screens
- 1 x 0.8 Pentalobe screwdriver (for iPhone® 4 iPhone® 4s, iPhone® 5)
- 1 x 1.2 Pentalobe screwdriver (for iPad®)
- 1 x 1.2 Phillips screwdriver (for iPhone® 3, and parts of iPhone® 4)
- 2 x Guitar pick opening tool
- 2 x Plastic prying tools



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2115	\$16.95	\$14.95	\$13.35

27 PIECE SMARTPHONE REPAIR KIT

A kit containing all the necessary tools you need to fix your Smartphone. This 27 piece Smartphone repair tool kit comes in a compact storage case with a hang tab to make sure that you don't misplace the kit after use. It is not limited to Smartphones either - it is designed to repair iMac®, Mac® air, iPhone®, Samsung®, HTC®, Nokia®, Sony® as well as many brands of mobile phone.

NEW
2015

Kit includes:

- Aluminium alloy handle
- 18pcs for 4mm bits: PH000, PH00, PH0, PH1, SL1.5, SL2.0, SL2.5
- -Torx: T4, T5, T6, T8, T10
- -HEX1.5, HEX2.0
- -Pentalobe 0.8, 1.2, 1.5
- -Tri-Lobe #0
- Plastic prying tools x 2
- Extension bar
- Guitar pick' opening tool
- Suction vacuum opener
- Tweezers x2
- SIM card ejector pin tool
- Soldering scraper tool
- Nylon ESD-safe probe with pointed and blade ends
- Dimensions: 190(L) x 130(W) x 26(D)mm



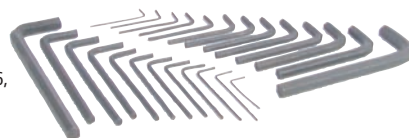
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2118	\$29.95	\$26.95	\$23.70

ALLEN KEYS

25 PIECE ALLEN KEY SET

25 different size Allen keys in a plastic wallet. Both metric and imperial sizes.

- Metric: 1.27, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 8.0, 10.0mm
- Imperial 3/8, 1/4, 7/32, 3/16, 5/32, 9/64, 1/8, 7/64, 3/32, 5/64, 1/16"



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2052	\$11.95	\$10.70	\$9.50

SPANNER SET

10 PIECE SPANNER SET FOR ELECTRONICS

Ideal mini spanner set. Set of 10 pieces, open end/ring combination. Suitable for light hobbyist use.

- Sizes supplied are: 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10 & 11mm.
- Supplied in a plastic wallet.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1910	\$19.95	\$17.70	\$15.70

MAGNETS

LARGE RARE EARTH MAGNETS - PAIR

These rare earth magnets are exceptionally strong. They are made from NdFeB (Neodymium Iron Boron), providing the highest available magnetic energy of any material. Suitable for a wide variety of applications where a very strong magnet is required. In fact, these are the same magnets used in our Faraday shake torches. The nickel casing protects the magnets because the material is very brittle.

- Sold as a pair.
- Dimensions: 19mm dia x 28.2mm long
- Grade: NdFeB, N35
- Coating: Nickel



↑	Cat.	Qty 1+	Qty 6+	Qty 20+
	LM-1652	\$29.95	\$26.90	\$23.70

RARE EARTH MAGNETS WITH MOUNTING HOLES

Super powerful rare earth magnets with 4.5mm countersunk mounting holes so you can fix them to your project to latch a door closed, etc.



⬆	Cat.	Qty 1+	Qty 6+	Qty 20+	
	Round 25(Dia) x 5mm	LM-1626	\$18.95	\$16.95	\$14.95
	Rectangle 50(L) x 20(W)mm	LM-1628	\$24.95	\$22.35	\$19.70

RARE EARTH MAGNETS

These magnets feature rare earth compounds combined with ferrite (anisotropic) to produce incredibly strong attraction/ repulsion. They are encased in nickel jackets because the material itself is very brittle. We warn you that getting a finger between these could result in a nasty pinch! They are provided with a nickel plated iron "keeper".



⬆	Cat.	Qty 1 +	Qty 6 +	Qty 20 +	
	Small - 10mm dia x 3mm - Pkt 4	LM-1622	\$13.95	\$12.35	\$10.95
	Medium - 25mm dia x 5mm - Each	LM-1618	\$17.95	\$15.95	\$14.35

FERRITE MAGNETS

Ideal for hobby and craftwork, school projects etc. Can be glued to wood, plastic rubber etc.

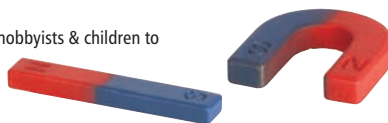


⬆	Cat.	Qty 1+	Qty 6+	Qty 20+	
	10L x 10W x 4Dmm - Pkt 12	LM-1616	\$6.95	\$6.25	\$5.50
	20L x 15W x 5Dmm - Pkt 6	LM-1614	\$6.95	\$6.25	\$5.50

MAGNET BARS

Educational magnets. Ideal for hobbyists & children to learn more about magnetism.

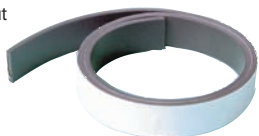
- Each end is marked with "N" or "S".



⬆	Cat.	Qty 1+	Qty 6+	Qty 20+	
	Bar Magnet - 70L x 12W x 5Dmm	TH-1874	\$1.95	\$1.75	\$1.55
	U Shaped - 30mm x 30mm	TH-1873	\$1.95	\$1.75	\$1.55

FLEXIBLE ADHESIVE MAGNETIC RUBBER STRIP

This self adhesive magnetic rubber strip can be cut down to suit an application and makes an ideal fridge magnet for adhering to promotional material such as menus, calendars etc.



- Dimensions: 15(W) x 500(L)mm.
- 2mm thick.

↑	Cat.	Qty 1+	Qty 6+	Qty 20+
	LM-1612	\$5.95	\$5.25	\$4.75

FULL RANGE OF PCB & COMPONENT TOOLS - TWEEZERS, EXTRACTION TOOLS, SCRIBERS, PUNCHES ETC SEE PAGE 27

NIBBLING TOOLS

NIBBLING TOOL

Will cut any shape out of aluminium, plastic, copper and other unhardened metals up to 18 gauge. Tool is designed to fit into the palm of your hand for easy use, simply drill a 1/4" hole to start.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1768	\$14.95	\$13.35	\$11.70

KNIVES

14 PIECE PRECISION HOBBY KNIFE SET

Handy hobby tool set comprising of 10 different blades, handle, 70mm long tweezers, 90mm long flat screwdriver and vernier calipers, which measure up to 81mm (3.1inches).

Blades included:

- 1 x #1
- 1 x #4
- 1 x #7
- 1 x #10
- 3 x #11
- 2 x #12
- 1 x #17

- Case dimensions: 170(W) x 85(W) x 35(D)mm



⬆	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Hobby Knife Set	TH-1916	\$19.95	\$17.70	\$15.70
	Spare Blades - 10 Per Set	TH-1917	\$5.95	\$5.25	\$4.75

ARTWORK KNIFE

Light duty precision knife with safety cap. Ideal for fine angle cuts, etching, hollowing, scoring, scraping, scribing, stripping and trimming. Four piece jaw chuck method of blade retention.



⬆	Cat.	Qty 1 +	Qty 3 +	Qty 6 +	
	Knife	HG-9955	\$4.95	\$4.45	\$3.90
	Blades Pkt 5	HG-9956	\$3.95	\$3.45	\$3.15

BENCHTOP WORK MAT

Protect your benchtop. This durable A3 size PVC cutting mat is just the thing to protect your work benchtop. You can cut on it, solder, write on it, and not damage your workplace. The mat is 3mm thick, and measures 450 x 300mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	HM-8100	\$12.95	\$11.35	\$10.35

TWEEZERS

STAINLESS STEEL TWEEZER SET

A set of 4 tweezers, three supplied with vinyl handles, comprising:

- 1 x self closing pointed type
- 1 x long curved pointed type
- 1 x long fine pointed type
- 1 x flat spatula type

Approximate length 115mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1752	\$8.95	\$7.95	\$6.95

ANTI-MAGNETIC PRECISION TWEEZERS

These are high quality tweezers made from anti-magnetic, anti acid steel. Perfect for handling SMD components, jewels or general electronic components.

- Length 110mm.
- Supplied with protective nylon cap.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1754	\$4.45	\$3.95	\$3.45

STAINLESS STEEL TWEEZER SET - ESD SAFE

A set of 3; duckbill head, angled fine and straight superfine enable you to manipulate surface mount components or other tiny items with ease. ESD coating on main body of tweezers greatly reduces static discharge issues.

- Measures: Angled & duckbill 120mm, superfine 135mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1760	\$16.95	\$14.95	\$13.35

ESD SAFE TWEEZERS WITH LED ILLUMINATION

These precision tip tweezers are ideal for picking up tiny objects with the added benefit of a LED light to illuminate the item being handled. Ideal for working with SMD components or jewels they are ESD (Electronic Discharge) safe and have teeth on the tip to ensure reliable grip on items.

- Includes 3 x SR41 batteries
- Dimensions: 155(L) x 15(W) x 10(H)mm

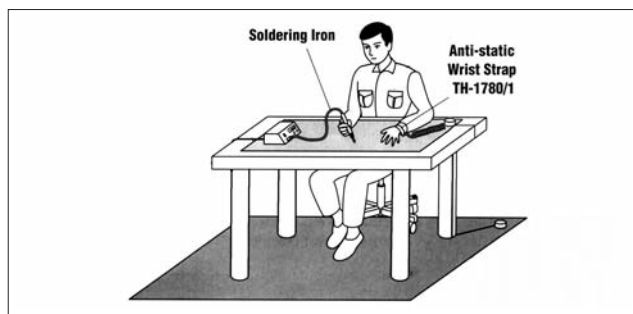


↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1761	\$9.95	\$8.75	\$7.75

ANTI-STATIC TREATMENT

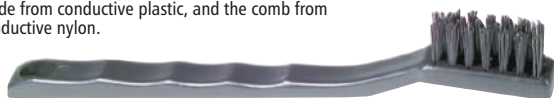
ANTI-STATIC PRODUCTS

Static control - both in the workshop/factory and in the field - is becoming increasingly important for reliable manufacture, repair and or installation of large surface mount LSI based boards. We offer a complete line of static control products for virtually any situation.



CONDUCTIVE BRUSH

This brush looks very much like a toothbrush. The handle is made from conductive plastic, and the comb from conductive nylon.



Use it to clean anything where static is a problem.

- Resistivity: $-10^4 - 10^6 \Omega$.
- Length 178mm.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1775	\$9.95	\$8.75	\$7.75

ANTI-STATIC WORKPLACE DESK MAT

This anti-static mat measures 555(W) x 290(D)mm and is ideal for anyone who manufactures, repairs or services sensitive electronic equipment. It is about 3mm thick, has a hard wearing face over a dense sponge rubber base. Can also be used as an anti-static base for computer keyboard.

- Top colour is grey.
- See opposite for connecting leads.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1783	\$19.95	\$17.70	\$15.70

ANTI-STATIC WRIST STRAP

Use when static electricity is a problem when soldering, changing ICs and installing expansion cards in computers etc. Static charges can destroy ICs instantly. Consists of adjustable Velcro wrist strap, coiled lead and banana plug/alligator clip.

- Expanded lead length about 1.8m

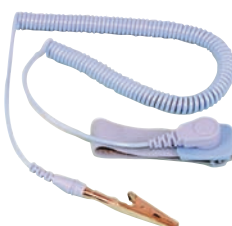


↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1780	\$13.95	\$12.35	\$10.95

ANTI-STATIC WRIST STRAP

Similar to the unit above, this strap has an extra long coiled lead of 3m/10ft extender. This makes it ideal for moving about your workbench without having to unclip yourself to do so. An elasticised wrist strap is also included, along with banana plug/alligator clip.

- Colour may vary.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1781	\$17.95	\$15.95	\$14.35

ANTI-STATIC FIELD SERVICE MAT / BAG

This mat is ideal for field service people, who need an anti-static work area when on the move. The mat folds out to a work area of approximately 600 x 600mm. At one end there are 2 pouches, and a ground lead and wrist strap are included. A very useful tool.



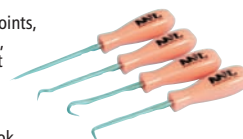
- Pouch size approx: 200 x 300mm.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1776	\$49.95	\$44.90	\$39.90

WORKSHOP TOOLS

4 PIECE MINI PICK & HOOK SET

These hook tools have stainless steel heat treated points, and are ideal for use on O-rings, springs, snap rings, washers, checking soldering joints, general hobbyist kit building, and probing into things, etc.



Hooks are:

- straight pick, 90° hook, full hook, small angle hook.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1762	\$15.95	\$14.35	\$12.70

PEARL CATCH

Incredibly handy tool for those moments when you need to pick up small fiddly bits and pieces.



- Will clip to and hold small nuts, bolts, washers, transistors, resistors, etc
- Metal construction

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1842	\$9.95	\$8.75	\$7.75

SUPER EXTENSION CLAW & MAGNETIC PICKUP

Actually two tools. Tool No. 1 is a 600mm long flexible syringe-action claw gripper similar in operation to a pearl catch. The 4 prong gripper will capture an object up to 15mm in diameter with about 500g of gripping force. It is ideal for retrieving, say, a nut or screws in an engine compartment or piece of equipment. Tool No. 2 is the same thing except that it has a magnet on the end instead of a claw. We sell them as a set because they complement each other.



↑	Cat.	Qty 1+	Qty 6+	Qty 20+
	TH-1868	\$6.95	\$6.25	\$5.50

SCRIBER

This pen type tool will scribe on metal, glass, plastic, ceramics and tools. Stylus is made of tungsten steel. Looks like a pen, and has a pocket clip. Length 110mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2120	\$7.95	\$6.95	\$6.25

AUTOMATIC CENTRE PUNCH

This handy tool allows you to make a centre punch mark with one hand. You simply hold the unit against where you would want a centre punch mark, apply downward pressure until the internal hammer mechanism trips. The pressure is adjustable, depending on the hardness of the surface. Sturdy brass body with hardened steel centre punch. 125mm long overall.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1770	\$7.95	\$6.95	\$6.25

DRILLS & DRILL SETS

PC DRILL BIT PACK - 10 PIECE

Includes all the common types:

- 1 x 3.5mm for PC supports and relays
- 2 x 1.2mm - for PC pins and hook-up wire
- 3 x 1mm - for resistors, capacitors, etc.
- 4 x 0.8mm - for ICs etc.

TOTAL - 10 DRILLS



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2400	\$12.95	\$11.35	\$10.35

MICRO DRILL BIT SET 0.7 - 2.2MM - 10 PIECE

Every hobby engineer needs a set of micro drill bits in the workshop. Quality HSS in incremental sizes from 0.7 to 2.2mm.

- Sizes (one of each): 0.7mm, 0.8mm, 0.9mm, 1.0mm, 1.2mm, 1.4mm, 1.6mm, 1.8mm, 2.0mm, 2.2mm (one each)
- Has 3mm shank to easily fit most chucks



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2407	\$14.95	\$13.35	\$11.70

20 PIECE MICRO DRILL SET 0.3 - 1.6MM

20 micro drills in an indexing storage case, ideal for drilling wood, composites, plastic or soft metals.

Indexed case enables removal of the bit you want without the risk of spilling them all over the place.

- Sizes: 0.3, 0.35, 0.4, 0.45, 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95, 1.0, 1.2, 1.3, 1.4, 1.6, 1.6mm
- Case size: 130(L) x 70(H) x 8(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2406	\$12.95	\$11.35	\$10.35

PCB DRILL CHUCK

This chuck will allow you to use drill bits from 0.6mm up to 2mm on your normal drill / cordless drill / power screwdriver or screwdriver which accepts standard hex bits.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2010	\$9.95	\$8.75	\$7.75

PIN VICE

A handy addition to any tool case. All metal construction with two internal collars. The head rotates freely making it ideal for drilling delicate PCBs or plastic cases.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1772	\$13.50	\$11.95	\$10.70

SPIRAL DRIVE DRILL / DRIVER



This unit is reminiscent of drill/drivers of 50 years ago (before cordless drills). The unit consists of a collet-type chuck and handle with a spiral shaft. Pushing the handle towards the job causes the collet to rotate. This would enable a drill (or screwdriver bit for that matter) to very gently and slowly rotate. It is ideal for very fine work and does need some practice to perfect your technique.

- Includes 2 pin vice collets: 0.3-1.0mm & 1.8-2.6mm
- Also 3 small drill bits in tubular case
- Measures: 180(L) overall (uncompressed) x 15(Dia.)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2089	\$16.95	\$15.70	\$13.35

STEPPED DRILL BITS

Drill multiple size holes with the one bit! You can drill through plastics and non-hardened metals (such as aluminium or copper sheeting etc) up to 4mm thick! Made from high speed steel (HSS), they will last for a very long time.



Two sizes available:

- 4 - 12mm drill in 1mm steps - TD-2436
- 12 - 20mm drill in 1mm steps - TD-2438

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
4 - 12mm	TD-2436	\$14.95	\$13.35	\$11.70
12 - 20mm	TD-2438	\$24.95	\$22.35	\$19.70

4 PIECE COUNTERSINK SET

The easy way to deburr or countersink. Simply drill hole, insert tool with appropriate bit, and turn for a countersunk angle of 90°. Bits include 12, 16 and 19mm - all hardened carbon steel.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2027	\$13.95	\$12.35	\$10.95

M4 METRIC TAPS

Clean up a cross threaded nut or cut a thread into a chassis or heatsink etc. High quality tool steel.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
4mm	TD-2442	\$4.45	\$3.95	\$3.45

31 PIECE MINI TAP & DIE SET

This 31 piece set is for the ultra small screws found in electronics. The kit consists of 9 metric screw cutting dies: 1.0, 1.1, 1.2, 1.4, 1.6, 1.8, 2.0, 2.2 & 2.5mm types in high speed steel and 18 equivalent taps in the same sizes above but with a taper and a plug version of the tap.



There are 2 die liners to accommodate the smaller dies in the stock supplied. You will love this rare product. Supplied in a see-through plastic case which securely holds all parts.

- Dimensions: 83(W) x 153(L) x 12(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2443	\$64.95	\$58.50	\$51.95

FILES

FILE SAW

This is a versatile tool that will find many uses around the home or workshop. Great for cutting odd shapes in plaster, PVC pipe, PVC sheeting, leather, plastic and many other soft materials. The tool will trim holes to any radius and get into places where others won't. The blade measures 175mm long and the large, easy grip handle is 120 mm long.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2127	\$15.95	\$14.35	\$12.70

10 PIECE NEEDLE FILE KIT

Every toolbox should have a set of needle files. This set contains every profile you could ever need. All have integrated plastic handles and come in a handy storage wallet. Each is 162mm long.

- Profiles:
- Round
 - Elliptical
 - Half-round
 - Double half round
 - Triangle
 - Square
 - Flat
 - Flat tapered
 - Knife
 - Flat tapered safe back



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
10 Piece	TD-2128	\$14.95	\$13.35	\$11.70

DEBURRING TOOL

Clean up the edges of a hole. Suitable for steel, plastic, wood etc. Blades are fully ground for safety. SK2 steel blades are hardened to HRC64. Supplied with spare blade. Will deburr virtually anything.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1845	\$9.95	\$8.75	\$7.75

MAGNIFIERS & INSPECTION AIDS

LABORATORY MAGNIFIERS & LAMPS

EYE MAGNIFIER

This 3 times magnifier is handy for checking PC boards, looking at stamps or coins, jewellery, etc. etc.

- Every hobbyist should have one.
- Dimensions: 28(H) x 22(dia view area) x 40(dia base)mm.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3515	\$8.95	\$7.95	\$6.95



SEE OUR RANGE OF DIGITAL MICROSCOPES ON PAGE 42

MAGNIFYING GLASS

This huge 4.5" diameter viewer allows hands free operation. It will fold into a neat and easy to store package.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3505	\$8.95	\$7.95	\$6.95

MICRO MAGNIFIER WITH LED

Having trouble reading or working on your hobby in fading or poor light? This convenient pocket-size magnifier with super bright LEDs allows you to work or read for longer periods. Comes complete with a soft pouch for easy storage. Ideal to take travelling or camping.

- 2 Super bright white LEDs
- 3 X magnification with super 5 X magnifier
- One touch ON/OFF operation
- Measures: 90(H) x 58(W) x 6(D)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3531	\$9.95	\$8.75	\$7.75

MAGNIFYING LENS WITH LEDS

Ideal for the elderly or vision-impaired. Keep one in the glovebox for reading the street directory in the dark.

- Big, clear 90mm lens illuminated by two LEDs
- Requires 2 x AAA batteries
- Dual magnification: 3X & 5X
- Case and cleaning cloth included
- Dimensions: 90(Dia.) x 160(L)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3537	\$9.95	\$8.75	\$7.75

50X MAGNIFIER WITH COVER TO SUIT IPHONE® 4/5

A handy iPhone® magnifier for technicians, jewellers, and model car/plane builders. Simply attach it to the back of your iPhone® to see a greatly magnified view of objects on your phones screen. Included are two brackets, one suitable for iPhone® 4s and one suitable for iPhone® 5.

- Magnification: 50x
- Dimensions: 117(L) x 61(W) x 11(H)mm

iPhone® not included

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3516	\$16.95	\$14.95	\$13.35

LED HEADBAND MAGNIFIER

This magnifying headset leaves both hands free and can be worn over prescription or safety glasses. It also has a built-in LED light that can be rotated up, down or side to side to illuminate your work. There are three lenses that can be used in combinations to give 1.5x, 3x, 8.5x or 10x magnification. The head strap is fully adjustable and locks into position and the lens assembly can be swivelled up out of the way when not in use. A multitude of uses including lapidary, jewellery, model-making, electronics and camera repair.

- Requires 2 x AAA batteries



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3511	\$29.95	\$26.90	\$23.70

10X LED MAGNIFIER WITH SCALE

With all metal construction and glass optics, this superb little magnifier provides 10 dioptre magnification with razor-sharp clarity. Inside the viewer is a graduated scale in metric and imperial graduations so you can actually take measurements of an object down to fractions of a millimetre. Three LEDs and the 26mm eyepiece provide crystal-clear even illumination of the subject. Ideal for checking PCBs in pre-production, lab, science, education or engineering applications. 2x AA batteries included.

- 10x magnification
- All metal construction
- Satin chrome finish
- Ground glass optics
- Dimensions: 180(L)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3539	\$29.95	\$26.90	\$23.70

6/12 LED MAGNIFYING GLASS

Extremely robust, this is not the kind of magnifier you keep in the desk and bring out occasionally. All metal construction makes it ideal for the lab, workshop or photography studio. The high quality glass lens provides superior optics. 12 LEDs ensure ample illumination for your work and can be switched to a low power setting of 6 LEDs.

- Zip nylon carry case
- 85mm lens diameter
- 3.5x dioptre magnification
- Requires 2 x AA batteries
- Dimensions: 240(L) x 110(Dia.)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3534	\$39.95	\$35.90	\$31.90

ILLUMINATED GOOSENECK MAGNIFIER

The gooseneck magnifier is a valuable accessory for coin/stamp collectors, photography etc. The 2X main lens and 5X insert lens with the bonus of 2 LED lights, is a welcome addition for any hobbyist. The magnifier is clip-on or free standing. Suitable for most flat surfaces or workplace incline up to 38mm thick. The flexible metal arm ensures that you can position the magnifier just where it's needed.

This handy magnifier also comes with a soft protective pouch for your lens to protect it from dirt and dust. It also has metal stabilisers to ensure that your magnifier remains stable while working.

- Stands 225mm high
- Includes protective lens pouch
- Lens Diameter: 110mm
- Requires 3 x AAA batteries



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QM-3532	\$29.95	\$26.90	\$23.70

LET'S FIND EVERYTHING YOU NEED!

FROM
\$39.95
TH-1923



WATCH REPAIR TOOL

P146

FROM
\$16.95
TH-1760



TWEEZERS

P141

FROM
\$19.95
TH-1980



PCB HOLDERS

P177

FROM
\$12.95
TH-1867



MAGNETIC WORKMAT

P138

LABORATORY MAGNIFIERS & LAMPS (CONTINUED)

DESKTOP LAB LED MAGNIFYING LAMP

No more fluorescent tubes to replace on your maggy lamp. Sixty LEDs provide ample illumination, perfectly even light and the 3x and 12x magnifying lenses show all the detail you need. Being LED, there's no delay in startup and they'll never need replacing. Ideal for hobbies, model making or jewellery.

- Dimensions: 320(H) x 95(Dia.)mm
- Lens Dia. 100mm



	Cat.	Qty 1+	Qty 5+	Qty 10+
↑	QM-3544	\$54.95	\$49.45	\$43.90

5 DIOPTRLE LED MAGNIFYING LAMP

Magnify and illuminate objects for analysis. A must have tool for technicians, researchers, or for general hobby work that involves soldering, connecting wires between small parts, and other fiddly jobs where the human eye simply does not suffice. This model has a metal frame and a 5 dioptrle lens allowing excellent magnification. The main extension arm can be manoeuvred in a myriad of ways to achieve perfect positioning and the lens is ringed with 90 bright white LEDs. Attachment to a desk can be achieved with the supplied clamp while a rolling base mount is available separately (QM-3549).

- 5 dioptrle lens
- Lens Dia.: 127mm
- Mains powered
- 90 x bright white LEDs
- Dimensions: 77(L) x 38(H) x 25(W)mm



	Cat.	Qty 1+	Qty 5+	Qty 10+
↑	QM-3548	\$109.00	\$89.95	\$79.95

DESK MOUNT LED LABORATORY MAGNIFYING LAMP

This is a high quality, all metal frame construction magnifier which features 90 super bright LEDs inside the magnifier head. The magnifier itself is made of glass and is a 3 dioptrle lens, with a metal handle for quick repositioning. A thumb screw positioned in between the two flexible extension arm assemblies (total extended length 990mm) allows exact positioning of the lens, and is assisted by a further thumb screw next to the lens head itself.

Mounting the magnifier is simple - screw the base onto the side of any desk or workbench (approx maximum table top thickness 45mm), and slot the magnifier into the bench mounted receptacle. The LEDs can be turned on or off with a magnifier head mounted switch, with the unit itself plugged into a mains outlet via a generous 2 metre long cord. A great tool to assist PCB assembly/inspection, jewellers, stamp/coin dealers, etc.



- 3 dioptrle magnification
- Lens Dia.: 120mm
- Light source: 90 LEDs
- Mains powered
- Total extended length 990mm

	Cat.	Qty 1+	Qty 5+	Qty 10+
↑	QM-3546	\$119.00	\$106.95	\$94.95

ROLLING FLOOR BASE FOR MAGNIFYING LAMPS

Mount a magnifying lamp to this base and you can roll it around the floor providing even greater flexibility in observation work. Great for lab work. Heavy base so it doesn't easy topple over.

- Suitable for use with magnifiers QM-3548 and QM-3546
- Dimensions: 700(H) x 385(Dia)mm



	Cat.	Qty 1+	Qty 5+	Qty 10+
↑	QM-3549	\$99.95	\$89.95	\$79.95

ULTRASONIC CLEANERS

DOMESTIC ULTRASONIC CLEANER

Suited to domestic use this ultrasonic cleaner cleans all your watches, jewellery, fountain pens, dentures, razor heads, printer heads, small silverware and small machined parts. Mains powered and easy to use. Fill the tank with water, add a mild cleaning solution and set the timer. The LCD tells you how long to go and the timer has 5 settings from 90 seconds up to 7 minutes 30 seconds.



Specifications	
Tank volume	550ml
Power consumption	50W
Time settings	1½ minutes 6 minutes 3 minutes 7½ minutes 4½ minutes

	Cat.	Qty 1+	Qty 3+	Qty 6+
↑	YH-5408	\$79.95	\$74.95	\$63.95

DIGITAL 2.5L 170W ULTRASONIC CLEANER

This unit features a generous 2.5 litre 304-grade stainless steel bowl, controllable heating element and digital controls. It comes with a lid (if you are using volatile solvents), features a stylish cabinet design and is supplied with a basket. Very well built.



Specifications	
Tank Capacity	2500ml (Max 2100ml, Min 600ml)
Power consumption	170W @ 240V 50Hz
Time settings	1 min 30sec, 3 mins, 4 mins 30 sec, 6 mins 30 sec, 8 mins
Ultrasonic freq	35kHz
Ceramic heater	100W approx with 65°C temp limit
Weight	2.5kg
Tank dimensions	245(W) x 150(D) x 76(H)mm
Unit dimensions	290(W) x 223(D) x 185(H)mm

	Cat.	Qty 1+	Qty 3+	Qty 6+
↑	YH-5412	\$169.00	\$151.95	\$134.95

PCB WASH DEFLUXING SOLUTION

Removes flux and residue from circuit boards to provide an extremely clean and contaminant free surface. The ready to use solution can be safely used in ultrasonic tanks for various applications including: jewellery, metal parts de-greasing, removing flux and cleaning sensitive electronic parts. Appropriate for both static and ultrasonic cleaner use.



- Non-flammable
- Water-based (Biodegradable)

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
1 Litre Bottle	NA-1070	\$12.95	\$11.35	\$10.35

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.



*ABN will be required - see our website or Store Manager for further details.

SPECIALTY REPAIR TOOLS

SPECIALTY SCREWDRIVERS

KEYRING SCREWDRIVER SET

This tiny key-size screwdriver set consists of a 5mm slotted driver, #2 Phillips driver and is small enough to be carried on your key ring, yet strong enough to loosen all but the toughest general purpose screws without damage. The drivers are made from chrome-vanadium steel and have a forged handle section that allows plenty of pressure to be applied to the job. Length 55mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2012	\$3.50	\$3.15	\$2.75

EYEGLASS REPAIR TOOL KIT

Repairing your glasses is now as easy as: drop it in, screw it down and snap it off. The eye glass repair kit makes fumbling with tiny replacement screws a thing of the past. This unique snap-off screw allows you to effortlessly guide the replacement screw where it needs to be.

- Repairs most eye glasses instantly
- No slipping, no dropping, no more frustration
- Includes: 4 x snap-off screws, 1x screw driver, convenient carrying tube

Note: Glasses not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2087	\$3.95	\$3.45	\$3.15

KEYRING SCREWDRIVER

A worthy addition to your keyring. Great for opening some mobile phones, watches, or other gadgetry.

- Smaller than it looks in picture
- Flat head screwdriver
- Phillips head screwdriver
- Hex nut driver
- Dimensions: 57(L) x 4(Dia.)mm

Note: Glasses not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2086	\$2.50	\$2.21	\$1.95

SPIRIT LEVEL

KEYRING SPIRIT LEVEL

Handy spirit level that attaches to your keys.

- Dimensions: 30(L) x 10(W) x 10(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1931	\$4.95	\$4.45	\$3.90

WATCH REPAIR TOOLS

Jaycar has been fiddling with micro tools for years now, from tiny jewellers screwdrivers to small spanner sets to tiny table mounted vices etc..

We have discovered a source of reasonably priced watchmakers' tools (real; pull-watches-apart-tools.)



Here they are, folks. We expect them to be popular; they are Jaycar kind of products.

2 PIECE WATCH CASE OPENER SET

This set consists of an adjustable opener that engages the little recesses on the back of a watch. You can adjust the removing lugs very accurately to get a tight fit - absolutely essential. The other half of the set looks like a small oyster shucking knife (Appropriate when you think about it!). It is just fine enough to get into that tiny groove that some of the older watch covers have.

- Can open cases 6 - 50mm diameter



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1929	\$17.95	\$15.95	\$14.35

4 PIECE WATCHMAKERS' KIT

Central to this kit is the hand held watch case opener/holder. It has a screw-adjustable case retainer with a very large selection of retaining lugs - indeed 18 in all, some the same. Also included as a large dusting bulb pump, No. 7 tweezers and fine dusting brush.

You will be delighted with this set.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1932	\$26.95	\$23.95	\$21.35

WATCHMAKERS MALLET WITH INTERCHANGEABLE HEADS

This unit weighs almost 90 grams and is 185mm long. It features 6 different heads, 4 steel ones, a brass one and acrylic plastic one. It seems that even in watchmaking you need a "persuader". Ball pein on the opposite end.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1927	\$9.95	\$8.75	\$7.75

WATCH BRACELET LINK REMOVAL PLIERS

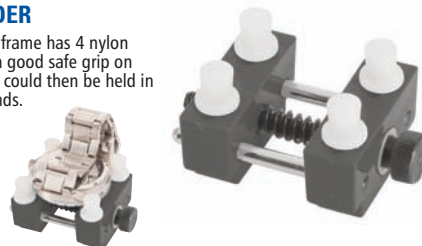
This tool enables you to remove and reinstall the fiddly little bracelet pins, so necessary when the bracelet band is new and generally too big for the wearer. It comes with a 1.0mm and 0.8mm pin removal insert.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1923	\$39.95	\$35.90	\$31.90

WATCH CASE HOLDER

The sturdy, but adjustable frame has 4 nylon retaining posts to enable a good safe grip on the watch case. The frame could then be held in a vice, freeing up your hands.



Note: Watch not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1934	\$12.95	\$11.35	\$10.35

WRIST STRAP SPRING BAR ASSORTMENT

This is a must. A selection of the little spring bars that get broken/bent/lost even by the most careful wearers. This set frees you from the tyranny of the watchmaker. One use will pay for the cost of the whole set.

The assortment consists of a total of 340pcs of the most common sizes: from women's 6mm to men's 23mm. All 1.5mm Dia. In detail the set includes 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, & 23mm types. Has single sided spring bar and double sided types.



Supplied in quality compartment case.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1928	\$17.95	\$15.95	\$14.35

PIN EXTRACTOR PRESS

A handy little pin-extractor/inserter press with a 0.8mm punch. Mainly intended for taking links out of watch bands, but endless other uses for jewellery making, modelmaking and hobbies.

- 2 spare pin punches
- Assortment of 12 pins



SEE OUR MINI HSS TAP & DIE SET ON PAGE 143

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-2014	\$9.95	\$9.25	\$7.75

DIGITAL MULTIMETERS COMPARISON GUIDE

Our test equipment range once again is underscored by our solid range of Digital Multimeters. Over the last couple of years our range of DMMs have remained very stable and this is the case again this year. We do a full comprehensive review every year but will only make a change if it is justified. Once again we have kept with the tried-and-true existing models.

Remember, so confident are we that we offer a **LIFETIME GUARANTEE** on most DMMs.



So why would you spend 2 or 3 times the price on an American or Euro meter when you can keep that money in your pocket & get basically the same performance from our products?

	QM-1502	QM-1500	QM-1523	QM-1524	QM-1328	QM-1323	QM-1551	QM-1548	QM-1444	QM-1549	XC-5078	QM-1594	QM-1571	QM-1574	QM-1543	QM-1576	QM-1493
Display (Count)	2000	2000	2000	2000	4000	4000	4000	2000	4000	4000	2000	4000	4000	4000	40000	40000	4000
Security Category	Cat II 240V	Cat II 500V	Cat II 600V	Cat III 600V	Cat III 600V	Cat III 600V	Cat III 600V	Cat III 600V	Cat III 600V	Cat IV 600V	Cat III 600V	Cat III 600V	Cat IV 600V	Cat IV 600V	Cat IV 600V	Cat IV 600V	Cat III 1000V
Backlight			✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	✓	✓
Bargraph														✓	✓	✓	✓
Auto-range				✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	
True RMS							✓			✓			✓	✓	✓	✓	
VDC	500V	1000V	500V	600V	600V	600V	600V	1000V	600V	1000V	600V	250V	1000V	1000V	1000V	1000V	1000V
VAC	500V	750V	500V	600V	600V	600V	600V	750V	600V	1000V	600V	250V	1000V	1000V	1000V	1000V	750V
ADC	10A	10A	10A	10A	200mA	10A	10A	10A	10A	10A	200mA	10A	10A	10A	10A	10A	
AAC				10A	200mA	10A	10A	10A	10A	10A	200mA	10A	10A	10A	10A	10A	
Resistance	2M	2M	2M	2M	40M	40M	40M	20M	40M	40M	20M	20M	40M	40M	40M	40M	400R
Capacitance					100μF	100μF	100μF	200μF	100μF	100μF			200μF	40μF	40mF	40mF	
Frequency					10MHz	10MHz	10MHz		10MHz	10MHz			10MHz	10MHz	10MHz	10MHz	
Inductance								20H									
Temperature						760°C	760°C	1000°C	760°C				760°C	1000°C	760°C	1200°C	
Tachometer									✓								
Duty Cycle					✓	✓	✓		✓	✓			✓				
Dwell									✓								
Continuity			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Diode Test	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Transistor Test	✓	✓	✓					✓									
Interface													✓			✓	
Data Logger													✓			✓	
Relative Measurement					✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	
Data Hold			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Min / Max Hold											Max hold		✓		✓	✓	
Non Contact Voltage						✓	✓					✓	✓				
IP67										✓			✓	✓	✓	✓	
Low Battery	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Page	148	148	148	149	149	150	150	150	151	151	151	152	152	153	153	154	154

LET'S FIND EVERYTHING YOU NEED!

<p>FROM \$11.95 TH-1897</p> <p>CUTTERS P131</p>	<p>FROM \$1.45 WH-5530</p> <p>HEATSHRINK P214</p>	<p>FROM \$19.95 TH-1820</p> <p>COAX STRIPPER P135</p>	<p>FROM \$19.95 TH-1935</p> <p>CRIMP TOOLS P134</p>	<p>FROM \$2.45 HP-0680</p> <p>CABLE CLIPS P220</p>
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MULTIMETERS

DIGITAL MULTIMETERS

MINI DMM

- 2000 Count
- Transistor test
- Diode Test
- 10A DC current
- Ideal first meter
- Compact size

LOW COST DMM

- 19 Range
- 2000 Count
- Transistor test
- Diode Test
- 10A DC current
- Ideal first meter
- Compact size

DATA HOLD DMM WITH BACKLIGHT

- 20 range
- 2000 Count
- Transistor test
- Diode test
- 10A DC current
- Data hold
- Backlight
- Low battery warning
- Continuity beeper
- Holster with stand



NOTE!
This meter includes QUALITY Test Leads



NOTE!
This meter includes QUALITY Test Leads



A fantastic little multimeter at a bargain price. Great for the hobbyist, student, or person who needs a cheap and quick way to check a few basic electronic measurements. Keep one in your car glove box or front shirt pocket. Test probes included.

PERFECT FIRST METER
This is a full featured meter with plug-in 4mm probes AND transistor tester. This is the ideal first multimeter, and will give years of faithful service, in fact, you will only need to replace this meter if you require a unit with very high input impedance.

A handy digital multimeter with lots of features at a great price. Has all the features you would expect including holster and probes included. Excellent for those just learning about DMMs.



Specifications	QM-1502	QM-1500	QM-1523
Display	2000 count	2000 count	2000 count
Security Class	Cat II 250V	Cat II 500V	Cat II 600V
Basic DCV accuracy	0.5%	0.500%	0.800%
DC voltage	200mV, 2000mV, 20V, 200V, 500V (± 0.5%)	200mV, 2V, 20V, 200V, 1000V (± 0.5%)	200V, 500V (± 0.8%)
AC voltage	200V, 500V (± 1.2%)	200V, 750V (Max input 750V RMS) (± 1.2%)	200uV, 2mV, 20mV, 200V, 500V (± 1.2%)
DC current	200µA, 2000µA, 20mA, 200mA, 10A (± 1%)	200uA, 2mA, 20mA, 200mA, 10A (± 1.2%)	200uA, 2mA, 20mA, 200mA, 10A (± 1%)
AC current	-	-	-
Resistance	200R, 2k, 20k, 200k, 2M (± 0.8%)	200R, 2k, 20k, 200k, 2M (± 1.2%)	200R, 2k, 20k, 200k, 2M (± 1%)
Capacitance	-	-	-
Frequency	-	-	-
Inductance	-	-	-
Temperature	-	-	-
Ave/RMS	Ave	Ave	Ave
Input impedance	-	1M	1M
Special features	Diode test, hFE	Transistor test	Transistor test, data hold, backlight
Dimensions	94(H) x 46(W) x 26(D)mm	125(H) x 68(W) x 23(D)mm	145(H) x 65(W) x 35(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1502	\$5.95	\$5.25	\$4.75

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1500	\$9.95	\$8.75	\$7.75

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1523	\$14.95	\$13.35	\$11.70

DIGITAL MULTIMETERS (CONTINUED)

CAT II AUTORANGING DMM

- CAT II 600V
- 2000 Count
- Data hold
- Back light
- Diode test
- Holster with stand & test probes

NOTE!
This meter includes QUALITY Test Leads



This CAT II DMM is suitable for voltages up to 600VAC and has 15mm high digits for easy reference.

Features include: Overload protection, 10A current, diode check. Supplied with: Rubber holster, High quality leads

ANALOGUE MULTIMETER

- Holster included
- Audible continuity

NOTE!
This meter includes QUALITY Test Leads



Digital multimeters have almost completely taken over, but there are those who prefer to use the old analogue meter - it's still the best way to test a capacitor. This well-made meter has audible continuity and a transistor test, in addition to the normal set of functions. Have a closer look at this meter. It's a beauty.

AUTORANGING POCKET DMM

- Autoranging
- Removable leads
- Auto power-off
- Data hold & relative function
- Capacitance
- Frequency
- Pocket sized

NOTE!
This meter includes QUALITY Test Leads



A handy little pocket DMM with plenty of features. Large LCD display with 4000 count, autoranging measurement with data hold and relative functions, and with replaceable leads make this a perfect companion to any technician, field engineer, mechanic, or even a handyman. Also does capacitance, frequency and duty cycle.



YEAR WARRANTY



GUARANTEE



GUARANTEE

Specifications	QM-1524	QM-1020	QM-1328
Display	2000 count	-	4000 count
Security Class	Cat II 600V	-	Cat III 600V
Basic DCV accuracy	0.800%	3.000%	1.000%
DC voltage	200mV, 2V, 20V, 200V, 600V (±0.8%)	100mV, 500mV, 2.5V, 10V, 50V, 250V, 1000V (±3.0%)	400mV, 4V, 40V, 400V, 600V (±1.0%)
AC voltage	200uV, 2mV, 20mV, 200V, 600V (± 1%)	10V, 50V, 250V, 1000V (±4.0%)	4V, 40V, 400V, 600V (±1.5%)
DC current	200uA, 2mA, 20mA, 200mA, 10A (± 3%)	50uA, 2.5mA, 25mA, 250mA (±3.0%)	40mA, 200mA (±1.5%)
AC current	200uA, 2mA, 20mA, 200mA, 10A (± 3%)	-	40mA, 200mA (±2.5%)
Resistance	200R, 2k, 20k, 200k, 2M (± 1.5%)	2k, 20k, 200k, 2M, 20M (±3.0%)	400R, 4k, 40k, 400k, 4M, 40M (±1.0%)
Capacitance	-	-	4nF, 40nF, 400nF, 4uF, 40uF, 100uF (±3.0%)
Frequency	-	-	up to 10MHz (±1.5%)
Inductance	-	-	-
Temperature	-	-	-
Ave/RMS	Ave	Ave	Ave
Input impedance	10M	10M	10M
Special features	Data hold, backlight	dB, continuity buzzer.	Pocket size, removable leads, data hold, relative function
Dimensions	140(H) x 70(W) x 31(H)mm	150(L) x 100(W) x 35(D)mm	115(H) x 60(W) x 16(D)mm
↑ Cat.	Qty 1+	Qty 3+	Qty 6+
QM-1524	\$19.95	\$17.70	\$15.70
↑ Cat.	Qty 1+	Qty 3+	Qty 6+
QM-1020	\$24.95	\$22.35	\$19.70
↑ Cat.	Qty 1+	Qty 3+	Qty 6+
QM-1328	\$29.95	\$26.90	\$23.70

MULTIMETERS

DIGITAL MULTIMETERS (CONTINUED)

CAT III DMM WITH TEMPERATURE

- Non-contact voltage
- Duty cycle
- Backlight
- Rugged moulded case

NOTE!
This meter includes QUALITY Test Leads



A budget-priced meter with everything you need - capacitance, temperature and 10A on AC and DC, compact and light weight with rugged moulded case.

CAT III INDUCTANCE CAPACITANCE DMM

- Hfe transistor test
- Inductance
- Capacitance
- Auto power-off
- 10A AC & DC current
- Diode test
- Audible continuity
- Data hold

NOTE!
This meter includes QUALITY Test Leads



A feature packed DMM with wide range of inductance and capacitance measurement which are measured via the standard probes. Ideal for audio enthusiasts designing their own crossovers. Features large LCD, auto power-off and temperature measurement.

CAT III TRUE RMS AUTORANGING 4000 COUNT DMM WITH TEMPERATURE

- Backlit LCD
- Woven nylon carry pouch with room for meter and leads
- Leads and k-type thermocouple included
- Automatic (-) negative polarity indication
- Meter automatically shuts down after 30 minutes of inactivity
- Powered by 1 x 9V battery (included)
- Data hold

NOTE!
This meter includes QUALITY Test Leads



A powerful true RMS multimeter that includes non-contact voltage testing, backlit LCD, and a carrying pouch. The rear of the unit has a foldout stand so you can sit the meter at a comfortable viewing angle on your desk, workbench or car.



Specifications	QM-1323	QM-1548	QM-1551
Display	4000 count	2000 count	4000 count
Security Class	Cat III 600V	Cat III 600V	Cat III 600V
Basic DVC accuracy	0.500%	0.500%	0.5%
DC voltage	400mV, 4V, 40V, 400V, 600V (±0.5%)	200mV, 2V, 20V, 200V, 1000V (±0.5%)	400mV, 4V, 40V, 400V, 600V (±1.5%)
AC voltage	400mV, 4V, 40V, 400V, 600V (±1.2%)	200mV, 2V, 20V, 200V, 750V (±0.5%)	400mV, 4V, 40V, 400V, 600V (±2.0%)
DC current	4mA, 40mA, 400mA, 10A (±2.5%)	20mA, 200mA (±1.0%), 10A (±2.0%)	400µA, 4000µA, 40mA, 400mA, 10A (±1.5%)
AC current	4mA, 40mA, 400mA, 10A (±3%)	2mA, 200mA (±1.0%), 10A (±3.0%)	400µA, 4000µA, 40mA, 400mA, 10A (±1.8%)
Resistance	400R, 4k, 40k, 400k, 40M (±0.8%)	200R, 2K, 20K, 200K, 2M, 20M (±0.8%)	400R, 4k, 40k, 400k, 4M, 40M (±1.2%)
Capacitance	4nF, 40nF, 4µF, 40µF, 100µF (±3%)	20nF, 200nF, 2µF, 200µF (±4.0%)	40nF, 400nF, 4µF, 40µF, 100µF (±3%)
Frequency	4kHz, 40kHz, 400kHz, 4000kHz, 10MHz (±1.5%)	-	5Hz, 50Hz, 500Hz, 5kHz, 50kHz, 500kHz, 5MHz, 10MHz (±1.2%)
Inductance	-	20mH, 200mH, 2H, 20H (±3.0%)	-
Temperature	-20°C to +760°C (±3%)	-20°C to +1000°C (±3.0%)	-20°C-760°C / -4°F-1400°F (±3%)
Ave/RMS	Ave	Ave	True RMS
Input impedance	10M	10M	-
Special features	Non-contact voltage, duty cycle, backlight	Hfe test, temperature, inductance	Continuity, diode check, blue backlit LCD, non-contact voltage, foldout stand
Dimensions	138(H) x 68(W) x 37(D)mm	195(H) x 92(W) x 55(H)mm	138(L) x 68(W) x 37(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1323	\$39.95	\$35.90	\$31.90

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1548	\$49.95	\$44.90	\$39.90

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1551	\$59.95	\$53.95	\$47.90

DIGITAL MULTIMETERS (CONTINUED)

AUTOMOTIVE DMM WITH INDUCTIVE PICKUP

- RPM x1, x10
- Inductive pickup for RPM
- Dwell angle
- Resistance
- DC volts
- Temperature
- Frequency
- Duty cycle %
- Data hold and relative function
- Probes, alligator clip probes and holster included

NOTE!
This meter includes **QUALITY** Test Leads



A multimeter for all your automotive diagnostic needs. Features an inductive pickup for RPM measurement, dwell angle, frequency, duty cycle, data hold, relative function, backlit display and temperature, and works with engines of 2 to 10 cylinders. An absolute must have for the backyard mechanic or qualified tradesperson alike.



IP67 TRUE RMS AUTORANGING CAT IV DMM

- IP67 waterproof
- True RMS
- Auto power-off
- Backlight
- Data hold & relative function
- Diode test
- Autoranging
- Audible continuity
- 10A current range
- Double moulded case

NOTE!
This meter includes **QUALITY** Test Leads



This is an excellent true RMS multimeter that features a large, easily read display and carries an IP67 environmental rating. This means the multimeter is waterproof and will not be damaged if accidentally dropped into water or left out in the rain. The meter has data hold and relative measurement capabilities and is housed in a robust, double moulded case. Includes leads, soft carry case and user manual.



DMM WITH NETWORK CABLE TESTER

- Autoranging
- LAN Cable Tester
- Diode Test
- Multimeter functions
- Audible continuity
- Case included
- LAN tester checks faults & miss wired conductors
- Manual or automatic testing

NOTE!
This meter includes **QUALITY** Test Leads



This innovative device is ideal for network installers or technicians & will allow the user to easily check cable integrity or measure AC & DC voltage, current, resistance, & continuity etc. without needing to carry two separate devices. The unit will check for cable continuity, open-circuits, short-circuits, & cross-connects etc. A remote terminator is included and enables the user to check network cables at a wall jack or patch panel. Supplied with loop back cable, LAN terminator, and multimeter leads.



Specifications	QM-1444	QM-1549	XC-5078
Display	4000 count	4000 count	2000 count
Security class	Cat III 600V	Cat IV 600V	Cat III 600V
Basic DC accuracy	1.500%	0.500%	0.500%
DC voltage	400mV, 4V, 40V, 400V, 600V ($\pm 1.5\%$)	400mV, 4V, 40V, 400V, 1000V ($\pm 0.5\%$)	200mV, 2V, 20V, 200V, 600V ($\pm 0.5\%$)
AC voltage	4V, 40V, 400V, 600V ($\pm 1.5\%$)	400mV, 4V, 40V, 400V, 1000V ($\pm 0.8\%$)	200mV, 2V, 20V, 200V, 600V ($\pm 1.2\%$)
DC current	400uA, 4mA, 40mA, 400mA ($\pm 1.5\%$), 4A, 10A ($\pm 2.5\%$)	4mA, 40mA, 400mA, 10A ($\pm 1.2\%$)	2mA, 20mA, 200mA ($\pm 1.5\%$)
AC current	400uA, 4mA, 40mA, 400mA ($\pm 1.8\%$), 4A, 10A ($\pm 3.0\%$)	4mA, 40mA, 400mA, 10A ($\pm 1.8\%$)	2mA, 20mA, 200mA ($\pm 2.0\%$)
Resistance	400R, 4k, 40k, 400k, 4M, 40M ($\pm 1.2\%$)	400R, 4k, 40k, 400k, 40M ($\pm 0.8\%$)	200R, 2k, 20k, 200k, 20M ($\pm 0.8\%$)
Capacitance	40nF, 400nF, 4uF, 40uF, 100uF ($\pm 3.0\%$)	4nF, 40nF, 4uF, 40uF, 100uF ($\pm 3\%$)	-
Frequency	5Hz~10MHz ($\pm 1.2\%$)	4kHz, 40kHz, 400kHz, 4MHz 10MHz ($\pm 1.5\%$)	-
Inductance	-	-	-
Temperature	-20°C to +760°C ($\pm 3.0\%$)	-	-
Ave/RMS	Ave	True RMS	Ave
Input impedance	10M	10M	10M
Special features	Inductive pickup, Dwell, RPM, duty cycle	IP67, data-hold, relative measurement, backlight	Data hold, max hold
Dimensions	146(H) x 66(W) x 42(D)mm	182(L) x 82(W) x 55(D)mm	162(L) x 74.5(W) x 44(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1444	\$59.95	\$56.50	\$47.90

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1549	\$79.95	\$74.95	\$63.95

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5078	\$79.95	\$71.95	\$63.95

MULTIMETERS

DIGITAL MULTIMETERS (CONTINUED)

MULTIFUNCTION ENVIRONMENT METER WITH DMM

- Sound level meter
- Light level meter
- Indoor temperature and humidity measurement
- Non contact voltage

NOTE!
This meter includes
QUALITY Test Leads



A multi-function environment meter that combines the functions of a sound level meter, light meter, humidity meter and temperature meter. Typical sound applications include checking acoustics of recording studios, auditoriums and professional hi-fi installations. The light and humidity meters are ideal for video photographers, greenhouse and hydroponic setups, etc. Others who should find this meter essential include interior designers, factory and office managers, record and archive keepers, schools, hospitals, laboratories and, of course, universities.



Specifications	QM-1594
Display	4000 count
Security Class	CATIII 300V
Basic DCV accuracy	1%
DC voltage	400mV, 4V, 40V, 100V, 250V (±1%)
AC voltage	400mV, 4V, 40V, 100V, 250V (±1%)
DC current	400µA, 4mA, 40mA, 400mA, 10A (±1%)
AC current	400µA, 4mA, 40mA, 400mA, 10A (±1.2%)
Resistance	400R, 4k, 40k, 400k, 4M, 40M (±1.5%)
Capacitance	50nF, 500nF, 5µF, 50µF, 100µF (±3%)
Frequency	5Hz, 50Hz, 500Hz, 5kHz, 500kHz, 10MHz (±1.2%)
Inductance	-
Temperature	-20°C to 750°C (±1.2%)
Ave/RMS	Ave
Input impedance	10M
Special features	LUX, SPL, Humidity
Dimensions	170(H) x 78(W) x 48(D)mm

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	QM-1594	\$99.95	\$89.95	\$79.95

IP67 TRUE RMS AUTORANGING CAT IV DMM WITH WIRELESS USB

- IP67 waterproof
- True RMS
- Wireless USB interface
- PC logging software
- Auto power-off
- Backlight
- Non-contact voltage
- Data hold
- Diode test
- Autoranging
- Audible continuity
- 10A current range
- Double moulded case

NOTE!
This meter includes
QUALITY Test Leads



A quality true RMS multimeter with a wireless USB computer interface, non-contact voltage indicator, relative zero and data hold. Double moulded housing is impact resistant and quite durable, and IP67 waterproof rating makes this DMM capable of even the harshest conditions. Wireless USB interface and included logging software allow for computer based live data logging whilst keeping your computer completely isolated and protected.



Specifications	QM-1571
Display	4000 count
Security Class	Cat IV 600V
Basic DCV accuracy	0.5000%
DC voltage	400mV, 4V, 40V, 400V, 1000V (±0.5%)
AC voltage	400mV, 4V, 40V, 400V, 1000V (±0.8%)
DC current	4mA, 40mA, 400mA, 10A (±1.2%)
AC current	4mA, 40mA, 400mA, 10A (±1.8%)
Resistance	400R, 4k, 40k, 400k, 40M (±0.8%)
Capacitance	4nF, 40nF, 4µF, 40µF, 100µF (±3%)
Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±1.5%)
Inductance	-
Temperature	-20°C to +760°C (±3.0%)
Ave/RMS	True RMS
Input impedance	10M
Special features	Wireless USB, IP67, True RMS, non-contact voltage
Dimensions	170(L) x 79(W) x 50(H)mm

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	QM-1571	\$109.00	\$102.95	\$86.95

DIGITAL MULTIMETERS (CONTINUED)

TOUGH HEAVY DUTY IP67 TRUE RMS AUTORANGING DMM

- IP67 waterproof
- Shockproof rugged design (2m drop)
- True RMS
- Datalogging
- Backlit LCD
- Auto power-off
- Data hold/Min/Max recording
- Analogue bargraph
- Relative measurement
- Diode test
- Autoranging
- Audible continuity
- 10A current range
- Double moulded case

This meter includes QUALITY Test Leads

DID YOU KNOW?
This DMM is drop proof to 2 metres!



This rugged and waterproof multimeter is designed for professional use and will provide many years of reliable service, even when thrown around the back of the van. It measures up to 1,000 volts AC & DC and is rated to CAT IV 600. The meter includes temperature and capacitance ranges, as well as peak-hold and min/max options. It is water and dustproof (IP67) and features a double moulded case that will easily withstand a 2m fall. Includes K-type thermocouple.

Note: Stocked product colour may vary



Specifications	QM-1574
Display	4,000 count
Security Class	Cat IV 600V
Basic DCV accuracy	0.060%
DC voltage	400mV, 4V, 40V, 400V, 1000V (+/- 0.5%)
AC voltage	400mV, 4V, 40V, 400V, 1000V (+/- 1.0%)
DC current	400uA, 4mA, 40mA, 400mA, 10A (+/- 1%)
AC current	400uA, 4mA, 40mA, 400mA, 10A (+/- 1.2%)
Resistance	400R, 4K, 40K, 400K, 4M, 40M (+/- 1%)
Capacitance	4nF, 40nF, 4uF, 40uF, 400uF, 4mF, 40mF (+/- 3%)
Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (+/- 0.1%)
Inductance	NA
Temperature	-40°C to +1000°C (+/- 1.2%)
Ave/RMS	TrueRMS
Input impedance	10M
Special features	Shockproof to 2m
Dimensions	180(L) x 82(W) x 57(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1574	\$109.00	\$99.00	\$89.00

IP67 TRUE RMS CAT IV DMM 40,000 COUNT

- IP67 waterproof
- Auto power-off
- Backlight
- Data hold
- Diode test
- Autoranging
- Audible continuity
- Relative measurement
- Double moulded case

This meter includes QUALITY Test Leads



This rugged meter is designed for professional use and will provide many years of reliable service. It measures up to 1,000 volts AC & DC and is rated to CAT IV 600. The meter includes temperature and capacitance ranges, as well as peak-hold and min/max options. It is water and dust-proof (IP67) and features a double moulded case that will easily withstand a 2m fall. Includes K-type thermocouple.



Specifications	QM-1543
Display	40,000 count
Security Class	Cat IV 600V
Basic DCV accuracy	0.060%
DC voltage	400mV, 4V, 40V, 400V, 1000V (±0.06%)
AC voltage	400mV, 4V, 40V, 400V, 1000V (±1.0%)
DC current	400uA, 4mA, 40mA, 400mA, 10A (±1%)
AC current	400uA, 4mA, 40mA, 400mA, 10A (±1.5%)
Resistance	400R, 4k, 40k, 400k, 40M (±0.3%)
Capacitance	4nF, 40nF, 400nF, 4uF, 40uF, 400uF, 4mF, 40mF (±3.5%)
Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±0.1%)
Inductance	-
Temperature	-20°C to +760°C (±1%)
Ave/RMS	TrueRMS
Input impedance	10M
Special features	Backlight, data hold, peak hold, min / max hold, relative measurement, bargraph, IP67
Dimensions	182(L) x 82(W) x 55(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1543	\$159.00	\$142.95	\$126.95

MULTIMETERS

DIGITAL MULTIMETERS (CONTINUED)

CAT III INSULATION TESTER/MULTIMETER

- Analogue/digital display
- Data hold
- Max/min
- Moulded case
- Backlit LCD
- Auto power-off
- Requires 6 x AA batteries

This meter includes QUALITY Test Leads



Commonly known as a megger and suitable for high voltage insulation testing up to 4 gigahoms at up to 1000V. It also has AC/DC voltage and low resistance multimeter functions. Moulded storage case and holster included.



Specifications	QM-1493
Display	4000 count
Security Class	Cat III 1000V
Basic DCV accuracy	0.800%
DC voltage	125V, 250V, 500V, 1000V (±0.8%)
AC voltage	125V, 250V, 500V, 750V (±1.2%)
DC current	-
AC current	-
Resistance	40R, 400R (±1.5%)
Capacitance	-
Frequency	-
Inductance	-
Temperature	-
Ave/RMS	-
Input impedance	-
Special features	Insulation Resistance 4M, 40M, 400M, 4000M (±2%), Continuity Test, Bargraph, Backlit, Data hold, Analogue Bargraph
Dimensions	200(L) x 92(W) x 50(D)mm

	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1493	\$209.00	\$178.95	\$158.95

IP 67 TRUE RMS CAT IV DMM WITH METERBOX SMARTPHONE APP



Meterbox app available on Google Play and iTunes®.

- IP 67 waterproof
- True RMS
- Bluetooth® Smartphone/PC interface
- Meterbox Smartphone app
- Data log storage
- 9999 measurement storage
- Triple LCD with bargraph
- Backlight
- Auto power-off
- Data hold/Min/Max recording
- Relative measurement
- Diode test
- Autoranging
- Audible continuity
- 10A current range
- Double moulded case

This meter includes QUALITY Test Leads



Smartphone screenshot



A multimeter with all the bells and whistles you would expect from our flagship multimeter, but it's so much more than that. With an in-built Bluetooth® module, this DMM can connect to your Smartphone, and using the free Meterbox app you can do everything you would expect to be able to do with a PC, and more. Stop carrying a laptop to job sites, all you need is this multimeter and the phone you already had in your pocket! View live measurements, trend graphs, data log, email your results and upload them to the cloud for your colleagues to review - all from your Smartphone! Of course, it still has all the other top notch features like a double moulded case for impact resistance and IP67 waterproof protection, internal data storage capability, data hold with min/max recording, wide capacitance range, and much more. For easy reading, a triple LCD backlit screen with bargraph displays all measurements clearly under all conditions.

A truly fantastic and ground breaking multimeter design.



Specifications	QM-1576
Display	40,000 count (0.01mV, 0.01uA, 0.01R)
Security Class	Cat IV 600V
Basic DCV accuracy	0.060%
DC voltage	400mV, 4V, 40V, 400V, 1000V (+/- 0.06%)
AC voltage	400mV, 4V, 40V, 400V, 1000V (+/- 1.0%)
DC current	400uA, 4mA, 40mA, 400mA, 10A (+/-1%)
AC current	400uA, 4mA, 40mA, 400mA, 10A (+/-1.5%)
Resistance	400R, 4K, 40K, 400K, 40M (+/-0.3%)
Capacitance	4nF, 40nF, 400nF, 4uF, 40uF, 400uF, 4mF, 40mF (+/-3.5%)
Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (+/-0.1%)
Inductance	-
Temperature	-20 degrees Celsius to +1200 degrees Celsius (+/- 1%)
Ave/RMS	TrueRMS
Input impedance	10M
Special features	Bluetooth®, Meterbox Smartphone app, data logging, IP67, bargraph, data hold/storage, triple LCD display
Dimensions	182(L) x 82(W) x 55(D)mm

	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1576	\$229.00	\$209.00	\$182.95

CLAMPMETERS

400A AC CLAMPMETER

- Autoranging
- Relative mode
- Diode test
- Audible continuity
- Data hold
- Auto power-off
- Jaw opening 30mm
- Temperature probe
- Carrying case

This meter includes QUALITY Test Leads



Our entry-level clampmeter. It has most of the features of the bigger models, such as data hold and auto power-off, but with only AC current measuring capability.



400A AC/DC CLAMPMETER

- Autoranging
- Relative mode
- Diode test
- Audible continuity
- Data hold
- Auto power-off
- Jaw opening 30mm
- Temperature probe
- Carrying case

This meter includes QUALITY Test Leads



Easy one-hand operation makes this meter perfect for the working installer or tradesman. This is a quality, intermediate-level clampmeter with more than useful current ranges up to 400 amps AC and DC.



1000A TRUE RMS AC/DC CLAMPMETER

- Autoranging
- Relative mode
- Diode test
- Audible continuity
- Data hold
- Min/max mode
- Auto power-off
- Jaw opening 40mm
- Temperature probe
- Carrying case

This meter includes QUALITY Test Leads



Ideal for electrical fitters and contractors working with high currents, this meter will read up to 1000A AC or DC. It has every feature you'll ever need in your trade.



Specifications	QM-1561	QM-1563	QM-1566
Display	4000 count	4000 count	6000 count
Security Class	Cat III 600V	Cat III 600V	Cat III 600V
Basic DCV accuracy	0.500%	0.500%	0.80%
DC voltage	400mV, 4V, 40V, 400V, 600V (±0.5%)	400mV, 4V, 40V, 400V, 600V (±0.5%)	600mV, 6V, 60V, 600V (±0.5%)
AC voltage	400mV, 4V, 40V, 400V, 600V (±1.5%)	400mV, 4V, 40V, 400V, 600V (±1.5%)	600mV, 6V, 60V, 600V (±1.5%)
DC current	-	40A, 400A (±2.0%)	600A, 1000A (±2.0%)
AC current	40A, 400A (±2.5%)	40A, 400A (±2.5%)	600A, 1000A (±2.5%)
Resistance	4k, 40k, 400k, 4M, 40M (±3.0%)	4k, 40k, 400k, 4M, 40M (±3.0%)	6k, 60k, 600k, 6M, 40M (±3.0%)
Capacitance	4nF, 40nF, 400nF, 4uF, 40uF, 100uF (±2.5%)	4nF, 40nF, 400nF, 4uF, 40uF, 100uF (±2.5%)	6nF, 60nF, 600nF, 6uF, 60uF, 100uF (±2.5%)
Frequency	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±1.2%)	4kHz, 40kHz, 400kHz, 4MHz, 10MHz (±1.2%)	6kHz, 60kHz, 600kHz, 6MHz, 10MHz (±1.2%)
Inductance	-	-	-
Temperature	-20°C to +1000°C (±3%)	-20°C to +1000°C (±3%)	-20°C to +1000°C (±3%)
Ave/RMS	Ave	Ave	TrueRMS
Input impedance	10M	10M	10M
Special features	Data hold, non-contact voltage, relative measurement	Data hold, non-contact voltage, relative measurement	Backlight, non-contact voltage, data hold, min-max, relative measurement, bargraph
Dimensions	198(L) x 66(W) x 36(D)mm	198(L) x 66(W) x 36(D)mm	230(L) x 76(W) x 40(D)mm

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	QM-1561	\$59.95	\$53.95	\$47.90

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	QM-1563	\$119.00	\$106.95	\$94.95

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	QM-1566	\$149.00	\$133.95	\$118.95

METER ACCESSORIES

MULTIMETER ACCESSORIES

FAST ACTING CARTRIDGE FUSES

FOR USE IN MULTIMETERS
Used in many well-known multimeters including Listed by Underwriters Laboratories and certified by CSA. Fast acting fuses designed for use in circuits with high AC fault current capacity.

- 600V 15A (SUITS FLUKE) Cat. SF-2274
- 600V 1A (SUITS FLUKE) Cat. SF-2276

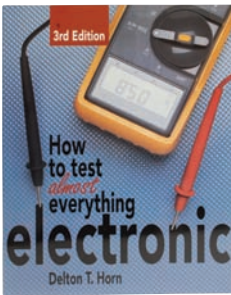
- Spare ferrule fuses for our IP67 CAT IV rated DMMs:
- 1000V 10A Cat. SF-2277
- 1000V 500MA Cat. SF-2278
- 1000V 800MA Cat. SF-2279



Size (mm)	Current	Voltage	Cat.	Qty 1+	Qty 3+	Qty 6+
32 x 6.3	0.5A	1000V	SF-2278	\$9.95	\$8.75	\$7.75
32 x 6.3	0.8A	1000V	SF-2279	\$9.95	\$8.75	\$7.75
35 x 10	1A	600V	SF-2276	\$8.95	\$7.95	\$6.95
38 x 10	15A	600V	SF-2274	\$17.95	\$15.95	\$14.35
38 x 10	10A	1000V	SF-2277	\$14.95	\$13.35	\$11.70

HOW TO TEST ALMOST EVERYTHING ELECTRONIC

Electronics is a unique science - everything that's going on has to be deduced from visible symptoms and effects with very little that is actually physically observable. We depend on test equipment to tell us what's really going on, and using test equipment is an essential skill in electronics. The book covers everything from setting up a test and work area to using the most important types of test equipment - multimeters, oscilloscopes, signal generators, signal tracers, capacitance meters and frequency counters. It also covers testing and measurement methods, fault finding without circuit diagrams, component testing and some highly specialised measurement in applications such as audio and TV.A comprehensive volume that should be on every technical bookshelf.



- Softcover 326 pages. 190 x 130mm

Cat.	Qty 1+
BM-7200	\$42.95

MULTIMETER CARRY CASE

Hard wearing and good looks make this multimeter case perfect for protecting your valuable multimeter from harm. With foam lining to cushion the meter, it zips up tight guarding it from dirty, dusty conditions.

- Dimensions: 190(L) x 125(W) x 45(D)mm



Cat.	Qty 1+	Qty 3+	Qty 6+
HB-6361	\$6.95	\$6.25	\$5.50

HIGH QUALITY BANANA PIGGYBACK TEST LEADS

A set of factory-moulded piggy-back style banana plugs, each connected by one metre of high-quality, ultra-flexible 500VDC, 12A rated cable.



- Contains 2 x black, 2 x red and 1 each of blue, yellow and green leads - 7 in all.

Cat.	Qty 1+	Qty 3+	Qty 6+
WT-5326	\$24.95	\$22.35	\$19.70

JUMPER LEAD KITS

STANDARD

Ideal for connecting devices for testing. Alligator clip size is approx 40mm, jaw opening is about 8mm and cable length is approx 400mm.



- 10 leads supplied 2 of each colour.

HEAVY DUTY

This kit has large alligator clips and heavy cable. The alligator clips are approximately 50mm long, and have jaw openings of about 10mm. Cable length is approx 300mm.

- 10 leads supplied, 2 of each colour.

Cat.	Qty 1+	Qty 10+	Qty 50+
Heavy Duty WC-6020	\$11.95	\$10.70	\$9.50
Standard WC-6010	\$6.95	\$6.25	\$5.35

RETRACTABLE 3M ALLIGATOR TEST LEAD SET

Set of 3 heavy duty leads in red, black, and green terminated with insulated alligator clips in a handy retractable reel. 3m in length, it is ideal for testing and troubleshooting electronic systems by connecting from components in machinery to test equipment or bypassing long wiring to isolate a fault.



- Rating when wound: 6A
- Rating when unwound: 10A
- Lead Length: 3m
- Reel Dimensions: 152(Dia) x 20(W)mm

Cat.	Qty 1+	Qty 4+	Qty 10+
WT-5334	\$29.95	\$26.90	\$23.70

LET'S FIND EVERYTHING YOU NEED!

PROBE K TYPE THERMOCOUPLE



This plug in thermocouple probe allows you to measure external temperature readings on DMMs. It will measure from below minus 50°C to above 250°C depending on the DMM it is used with. Suitable for gas and liquid, both with good accuracy of 0.75%.

Cat.	Qty 1+	Qty 3+	Qty 6+
QM-1282	\$14.95	\$13.35	\$11.70

WIRE TYPE K THERMOCOUPLE WITH TWIN BANANA PLUGS



Similar to our other thermocouples, this one is fitted with banana plug terminations but does not have a 'probe' assembly. The thermocouple junction will measure over a wide range of temperature but this will depend on the DMM used.

- Typical thermocouple measurement range from as low as -50°C to over 1200°C

Cat.	Qty 1+	Qty 3+	Qty 6+
QM-1284	\$11.95	\$10.70	\$9.50

WIRE TYPE K THERMOCOUPLE



This is essentially the same as the probe type shown on this page, except that the sensor is mounted on the end of the cable - no probe. Suits digital multimeters. Measures from below minus 40°C to over 1200°C, actual range depends on the DMM its used with.

Cat.	Qty 1+	Qty 3+	Qty 6+
QM-1283	\$11.95	\$10.70	\$9.50

TEST LEADS

PARROT™ CLIP LEADS

The Parrot™ Clip is the only test probe that provides both clip-on hands free contact as with an EZ-hook and normal point contact like a test probe. These feature a sprung hook, which is soldered directly to the lead and housed inside a round metal tube. The grip is performed between the 2 metal parts, which can be used as pincers if required. Probes are supplied with 1m leads terminated to banana plugs and are fully insulated to 1000V.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5330	\$24.95	\$22.35	\$19.70

MULTIMETER PROBE ALLIGATOR CLIPS

Turn your DMM probes into clips!

- These alligator clips simply push onto the end of the test probes
- Length approximately 55mm
- Jaw opening 8mm
- Sold as a pair - 1 red, 1 black



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5220	\$3.95	\$3.45	\$3.15

16 PIECE TEST LEAD SET

Consists of two leads with screw sockets on each end. Attachments screw in. All colour coded red and black.

- 4 x alligator clips
- 4 x 2mm pin tips
- 4 x banana plugs
- 2 x spade lugs



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5218	\$9.95	\$8.75	\$7.75

MULTIMETER TEST PROBES SHROUDED TYPE

- Banana plugs are right angle with 15mm covered pin.
- Alligator clips included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5325	\$13.95	\$12.35	\$10.95

2MM TEST PROBES FOR MULTIMETERS

- Sold as a pair



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Black/Red	PP-0425	\$3.75	\$3.30	\$2.95

PROFESSIONAL CAT IV MULTIMETER PROBES

Professional multimeter test probes have always been an expensive choice so what we've done is work closely with a manufacturer to get great quality probes at a genuinely affordable price! There is no longer a need to settle for second best with your multimeter probes, especially if you have them in your hand almost every day.

To start with, we've made them extra long; they're 1200mm long so you don't drag your meter across your workbench as you move around a circuit and makes them perfect for bench top meters. They're Cat IV rated for safety, feature finger guards and can handle 20A of current. The best part is the actual probes themselves. To start with, the probes are suitable for inserting into a standard 4mm banana socket using the same spring hold system. Also included are probe covers which not only stop the sharp points being dangerous, they allow only just the tip to be exposed for delicate work where you can be in danger of making a short between two connections which are close together.

- Extra long 1200mm
- 600V Cat IV rated
- 20A current rating

Probes suitable for inserting (and holding) in 4mm banana sockets. Probe safety cover with slot for delicate work. Comfortable and ergonomic grip.

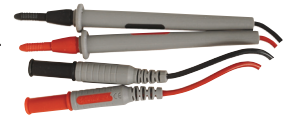
Sold as a pair.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Pair	WT-5338	\$17.95	\$15.95	\$14.35

CAT IV TEST LEAD SET

CAT IV Test Lead Set with straight banana plugs.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5333	\$11.95	\$10.70	\$9.50

MULTIMETER TEST PROBES

With 4mm right angle unshrouded banana plugs.

- Length 930mm
- Suits QM-1500, etc



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5316	\$4.95	\$4.45	\$3.90

TEST LEADS

Banana plugs to clip. There are many situations where multimeter probes are difficult to use.

- Length: 700mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WT-5320	\$5.95	\$5.25	\$4.75

SMD DMM TEST LEADS

Designed for measuring SMD components in-circuit. This lead set has standard 4mm banana plugs to fit any DMM. These tweezer style probes allow easy one-handed operation.

- Gold plated tips
- Lead length: 1m



NEW LOW PRICE

↑	Cat.	Qty 1+
	WT-5302	\$3.95

EZ HOOK TEST CLIPS - 40MM

Suitable for ICs, transistors, PC pins, etc. Push syringe action. Hirshmann style.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	HM-3036	\$1.75	\$1.55	\$1.40
Black	HM-3037	\$1.75	\$1.55	\$1.40

IC TEST CLIPS

These have a syringe action and are ideal for working with small components. Length 57mm.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	HM-3040	\$1.95	\$1.75	\$1.55
Black	HM-3041	\$1.95	\$1.75	\$1.55

OSCILLOSCOPES

DIGITAL STORAGE OSCILLOSCOPES

Consign your CRO to the dustbin of history where it belongs and go digital. Once they were so expensive only professionals could justify buying them, they're now within the reach of anyone in the market for a dual trace scope. The advantages of a DSO gives you capabilities that simply aren't possible

- Full 64k colour TFT display
- Compact size much smaller than an equivalent analogue CRO
- Fully portable design

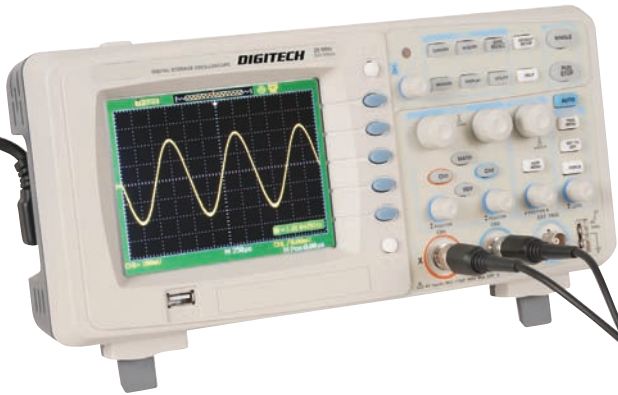
- Storage memory
- USB interface
- Multiple trigger modes
- Digital filters

- Multi parameter auto measure function
- Split screen display
- On-screen menus
- Multiple language interface



Your DSO can also serve as a benchtop multimeter or frequency counter. It even has an FFT function for viewing frequency domain data. Quality 10:1 probes, EasyScope software and USB cable are also included.

25MHZ DUAL CHANNEL WITH 5.7" SCREEN

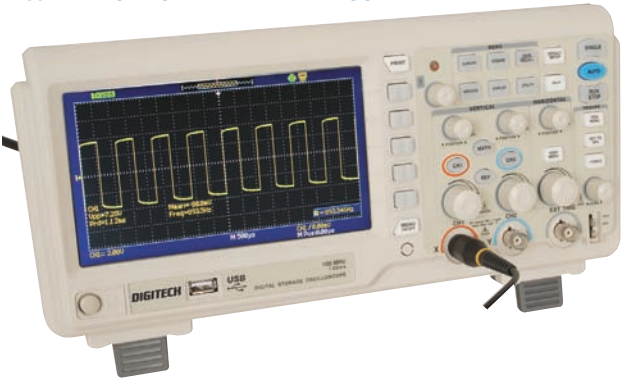


Ideal entry-level DSO for the advanced hobby user or technician and is particularly suited to audio work. Full data storage capabilities and USB interface so you can store traces on a flash drive. Memory depth 32K
Cat. QC-1932

DID YOU KNOW?

Both models include quality probes, EasyScope software and a USB cable. The QC-1934 even comes with a carry bag.

100MHZ DUAL CHANNEL WITH 7" SCREEN



Professional level test instrument for the technician, design engineer or development laboratory. Full 100MHz bandwidth plus a host of features including large 7" screen. Light and portable, and it even includes a carry bag.

- Digital filter function and waveform recorder function
 - Pass/fail function
 - Two groups of reference waveforms and 20 groups of capture waveforms
 - Channel waveform and its FFT waveform on split screen
 - PictBridge compatible
 - Memory depth up to 2Mpts
 - Armed with waveform record function. Max. 6M record data, Max. 33.3 record hours
 - New trigger types, including Edge, Pulse, Video, Slope, Alternative
 - Larger measurement range, Max.10V/div
 - Screen-saver enables less power-consuming, prolong product lifetime
 - Double windows display enlarged waveform and original waveform simultaneously
 - Multi-interfaces, enable to use GPIB function with our USB-GPIB
- Cat. QC-1934

Specifications	QC-1932
Channels	2
Input impedance	1Mohm
Bandwidth	25MHz
Sampling rate	500M Sa/sec
Input coupling	AC, DC, GND
Max input voltage	400V P-P, Cat II
Triggers	Edge, pulse, video, slope, alt, delay
Trigger modes	Auto, normal, single
Mathematical operations	Add, subtract, multiply, divide, invert
Display modes	
DC Accuracy	± 3%
Data Record Function	Yes
Memory Depth	32K
Display	
Type	Colour TFT LCD 145mm
Resolution	320 x 234 pixels
Colour	64k
Contrast	150 to 1
Graticule	8 x 12 div.
Vertical	
Vertical sensitivity	2mV - 5V/div
Vertical resolution	8 bit
Rise time	<14ns
Mathematical operations	Add, subtract, multiply, divide, FFT
FFT	Hanning, Hamming, Blackman, Rectangular
Horizontal	
Range	25ns - 50s/div
Accuracy	±50ppm over 1ms
Other	
Dimensions	310(W) x 150(H) x 130(D)mm
Weight	2.4kg
Accessories	2 x 10:1 probes, EasyScope software, USB cable

Specifications	QC-1934
Channels	2
Input impedance	1Mohm
Bandwidth	100MHz
Sampling rate	1G Sa/Sec (Per channel)
Input coupling	AC, DC, GND
Max input voltage	400V DC+AC P-P, Cat II
Triggers	Edge, pulse, width, video, slope, alt, delay
Trigger modes	Auto, normal, single
Mathematical operations	Add, subtract, multiply, divide, FFT
Display modes	Main, window, window zoom, scan, X-Y
DC Accuracy	± 3%
Data Record Function	Yes
Memory Depth	2mpts
Display	
Type	Colour TFT LCD 178mm
Resolution	480 x 234 pixels
Colour	64k
Contrast	150 to 1
Graticule	8 x 18 div.
Vertical	
Vertical sensitivity	2mV - 10V/div
Vertical resolution	8 bit
Rise time	<3.5ns at 100MHz
Mathematical operations	Add, subtract, multiply, divide, FFT
FFT	Window mode: Hanning, Hamming, Blackman, Rectangular Sampling points: 1024
Horizontal	
Range	2.5ns - 50s/div
Accuracy	±50ppm over 1ms
Other	
Dimensions	340(W) x 150(H) x 110(D)mm
Weight	2.4kg
Accessories	2 x 10:1 probes, EasyScope 3.0 software, USB cable

NEW
LOW
PRICE

	Cat.	Qty 1 +	Qty 2 +	Qty 5 +
25MHz	QC-1932	\$499.00	\$449.00	\$399.00

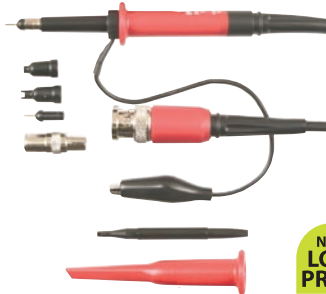
	Cat.	Qty 1 +	Qty 2 +	Qty 5 +
100MHz	QC-1934	\$849.00	\$765.00	\$679.00

HANDHELD OSCILLOSCOPES

CRO PROBE - 100:1

Low input capacitance high voltage oscilloscope probe designed and calibrated for use with instruments having an input impedance of 1M Ω shunted by 10pF. It may be compensated for use with instruments having an input capacitance of 15 to 35pF.

- Suits all of the oscilloscopes in our range
- Supplied with sprung hook, channel identifier clip, ground lead, insulating tip, IC tip, measuring tip, BNC adaptor, and adjusting tool



NEW
LOW
PRICE

Specifications	QC-1903
Attenuation ratio	100:1
Rise time	1.4ns
Compensation range	10 to 35pF
Input resistance	100M Ω when used with oscilloscopes with 1M Ω input
Working voltage	1200VDC incl. peak AC de-rating with frequency
Cable length	1.2m
Bandwidth	DC to 250MHz
Input capacitance	5.5pF (approx.)
Safety	Meets IEC1010-1 CAT.II

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	QC-1903	\$47.95	\$42.95	\$38.45

CRO PROBE - 10:1 / 1:1

Passive high impedance oscilloscope probe designed and calibrated for use with instruments having an input impedance of 1M Ω shunted by 20pF. It may be compensated for use with instruments having an input capacitance of 15 to 35pF. The probe incorporates a three-position slide switch in the head, which selects attenuation of x1, x10 or a ground reference position. This probe suits all of the oscilloscopes in our range. Supplied with sprung hook, channel identifier clip, ground lead, insulating tip, IC tip and adjusting tool.



Specifications	Position x10	Position x1
Attenuation ratio	10:1	1:1
Bandwidth	DC to 60MHz	DC to 6MHz
Rise time	5.8ns	5.8ns
Input resistance	10M Ω when used with oscilloscopes with 1M Ω input	1M Ω (oscilloscope input resistance)
Input capacitance	23pF (approx.)	128pF plus oscilloscope capacitance
Compensation range	15 to 35pF	15 to 35 pF
Working voltage	600VDC incl. Peak AC derating with frequency	600V DC incl. Peak AC derating with frequency
		Cable: 1.4m
		Safety Meets IEC1010-1 CAT.I

POSITION REF
Probe tip grounded via 9M Ω resistor, oscilloscope input grounded.

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	QC-1902	\$39.95	\$35.90	\$31.90

10MHZ RECHARGEABLE HANDHELD POCKET SCOPE

- Hand held
- Rechargeable
- Durable rubber surround
- 6 hour run time
- Memory storage for 2 signals
- Backlit display
- Full auto range operation
- Includes CRO probe



1
YEAR WARRANTY

A vital piece of test equipment for hobbyists, students, technicians, or designers, the Velleman HPS140 pocket scope is a complete portable oscilloscope with a tiny size. With dozens of features found on full size digital oscilloscopes you'll be amazed how they squeezed all of it into a package a little larger than a Smartphone.

It's impressive list of features include full auto range operation, input sensitivity down to 1mV, real time sample rate up to 40MS/s, and bandwidth up to 10MHz. Aside from the standard scope features it also has some nifty tools including on screen markers for measurement of amplitude and time, RMS power measurement on audio speakers from 2 to 32 Ohms, hold function for the current display, and memory storage for 2 signals which are retained even after shutdown. The unit is housed in a durable rubber surround and the screen is LED backlit for easy viewing. An in-built Ni-MH battery gives up to 6 hours of run time and can be recharged with the included USB charge cable or a 9VDC plugpack (not included use Cat. MP-3146). Supplied with 1:1/1:10 CRO probe and USB charge cable.

Specifications	QC-1914
Bandwidth	10MHz
Real time sample rate	40MS/s
Max input voltage	100Vp AC or DC
Input coupling	DC, AC, and GND
Timebase range	250ns to 1hr per division in 32 steps
Input range	1mV to 20V per division in 14 steps
Display size	50(W) x 25(H)mm
Display resolution	Full 128(W) x 64(H) pixels, Signal 118(W) x 49(H) pixels
Accuracy	+/-2.5%
Weight	200g
Battery	Inbuilt 4.8V Ni-MH rechargeable
Battery life	Up to 6hours
Recharge	9VDC 200mA from included USB charge cable or plugpack (available separately Cat. MP-3146)
Dimensions	114(H) x 74(W) x 29(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	QC-1914	\$249.00	\$225.00	\$198.95

10MHZ/4000 COUNT HANDHELD SCOPE DMM

- True RMS
- Digital Oscilloscope
- USB PC interface
- PC logging software
- 128x128 graphic LCD display
- LED Backlight (3-stage)
- Auto power-off
- Data hold/Min/Max recording
- Relative measurement
- 100 record memory storage
- Diode test
- Autoranging
- Audible continuity
- 20A current range



1
YEAR WARRANTY

Smartly combines a well featured digital oscilloscope and a 4,000 count True RMS digital multimeter into one versatile package, whilst also featuring a USB interface and PC software to match. Perfect for laboratory work or for technicians working in the field, with more features than you can jab a probe at.

DSO Specifications	QM-1577
Simulation bandwidth	DC 10MHz
Vertical resolution	8 bits
Vertical sensitivity range	50m V/div - 200V/div
Vertical amplitude precision	+ - (5% + 0.1div)
Automatic zero reference	In DC/dB measurement
Trigger level	+ - 12 div (at each step 0.1 div)
Max real-time sampling rate	50MSps
Nonlinearity	+ - 1 bit
Coupling	DC/AC/GND
Indexing	Vertical + - 4.0, horizontal 12.8
When range	0.20us/div - 20s/div
Accuracy	+ -(0.01% + 0.1 div)
Scanning mode	Auto/normal/single
Trigger slope	Rising along/down along

DMM Specifications	
Display	128 x 128 graphic LCD (4000 count)
Security class	Cat III 1000V
Basic DCV accuracy	0.75%
DC voltage	400mV, 4V, 40V, 400V (+/-0.75%), 1000V (+/-1.5%)
AC voltage	400mV, 4V, 40V, 400V (+/-1%), 1000V (+/-1.5%), 50Hz-1kHz
DC current	40mA, 400mA, 4A, 20A (+/-1.2%)
AC current	40mA, 400mA, 4A, 20A (+/-1.5%), 50Hz-1kHz
Resistance	400R, 4K, 40K, 400K, 4M (+/-1%), 40M (+/-3%)
Capacitance	51.2nF, 512nF, 5.12uF, 51.2uF, 100uF (+/-2%)
Frequency	5.12Hz 5.12MHz (+/-1%)
Inductance	
Temperature	
Ave/RMS	True RMS
Input impedance	10M
Special features	USB/PC interface, graphic display
Dimensions	186(L) x 86(W) x 32(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	QM-1577	\$399.00	\$359.00	\$319.00

FUNCTION GENERATOR & DATA LOGGERS

FUNCTION GENERATOR

HANDHELD 1MHZ FUNCTION GENERATOR

Finally, a signal generator with the features of a bench top generator and a portable size! The Velleman HPG1 pocket signal generator will produce accurate test signals at frequencies from 1Hz all the way to 1MHz yet it is only a little bigger than a smartphone.

Easy to use, the pushbutton controls allow you to quickly set up generation of sine, square, and triangle waveforms with adjustable frequency and amplitude. The backlit LCD screen shows the current waveform and frequency settings. Frequency changes are in variable steps from 1Hz to 10kHz allowing you to change settings at your preferred speed. For more advanced testing it also has a frequency sweep mode to shift between two frequencies using a linear or logarithmic scale over an adjustable period. Signal amplitude is indicated by a handy slider bar with the output level also displayed in dBm and Vrms or Vpp (depending on waveform). An inbuilt Ni-MH battery gives up to 6 hours of run time and can be recharged with the included USB charge cable or a 9VDC plug pack (not included use Cat. MP-3146). Supplied with USB charge cable, BNC to RCA adaptor, and BNC to binding post adaptor.

Specifications	
Digital to analogue converter resolution	10 bits
Frequency range	1Hz to 1MHz
Frequency steps	1Hz, 10Hz, 100Hz, 1kHz, 10kHz
Waveforms	Sine, square and triangle
Maximum output voltage	8Vpp
Sweep modes	Linear or logarithmic, single or bidirectional
Sweep period	0.01Hz to 100Hz
Dimensions	114(H) x 74(W) x 29(D)mm
Display size	50(W) x 25(H)mm
Display resolution	128(W) x 64(H) pixels
Weight	200g
Battery	Inbuilt 4.8V Ni-MH rechargeable
Battery life	Up to 6hours
Recharge	9VDC 200mA from included USB charge cable or plug pack (sold separately use Cat. MP-3146)



	Cat.	Qty 1 +	Qty 2 +	Qty 5 +
	QT-2304	\$199.00	\$178.95	\$158.95

USB TEMPERATURE/HUMIDITY DATALOGGERS

A must for anyone involved with food preparation, archiving or storage or applications where starge of environment information is important. These USB dataloggers log temperature and humidity readings and store them in internal memory for later download to a PC. The measurement interval is adjustable - you simply set up the

recording parameters then download the data when you need it. The data is recorded at the prescribed intervals and will alert you if preset min/max levels are exceeded. Countless applications including greenhouses, museums, warehouses, container storage, photography, archives, food preparation etc.

Two models available with mounting bracket and software included:

DIRECT PLUG IN TYPE

- Easy USB interface
- Mounting bracket included
- 32000 sample memory (16000 temperature, 16000 humidity)
- Software compatible with Windows 2000, XP, Vista

QP-6013



Specifications	
Range	-40 - 70°C (-40 - 158°F), 0 - 100% relative humidity
Accuracy	Humidity ±3%, Temperature ±1°C
Resolution	Humidity 0.1% , Temperature 0.1°C
Memory	3200 samples
Battery life	5 sec rate: 12 months, 10 sec rate: 2.5 years
Dimensions	100(L) x 22(W) x 20(H)mm

	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	QP-6013	\$119.00	\$106.95	\$94.95

USB / LCD READOUT TYPE

- 32,700 sample memory
- Adjustable measurement cycle
- Analysis software included
- Software compatible with Windows 2000, XP, Vista

QP-6014



Specifications	
Range	-40 - 70°C (-40 - 158°F), 0 - 100% relative humidity
Accuracy	Humidity ±3%, Temperature ±1%
Resolution	Humidity 0.1% , Temperature 0.1°C
Memory	32,700 samples
Measurement cycle	1s - 24h
Dimensions	95(H) x 50(W) x 32(D)mm

	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	QP-6014	\$149.00	\$133.95	\$118.95



SOMETHING TO CONSIDER!

Very early in 2015 I had a 'routine' colonoscopy! This was my first and was well and truly overdue for a male, 65 years of age.

The procedure revealed a serious cancerous lesion on my large intestine. No symptoms! Indeed, such is the degree of resolution of the colonoscopy technology it also showed up another very small lesion (about the size of a grain of rice nearby.) This small growth would probably have become malignant a few years from now. Quick, expert surgical intervention removed this hideous intrusion. So successful was this procedure, that I have been spared follow-up chemotherapy.

The lesson in this? Most, over 90% of Jaycar customers are males. Males, being males have issues with health denial. We can only aspire to the way women face the reality of health issues.

So, if you are a male, aged 50-55 whether you have a history in your family or not, and if you have not had one, book in for a colonoscopy NOW.

Make this a must do...

Gary Johnston

NON-CONTACT THERMOMETERS

ECONOMY NON-CONTACT THERMOMETER

- Built-in laser pointer
- Wide temperature range
- 8:1 Distance to spot ratio
- Auto data hold
- Carry case included



Safely measure temperature in hard to reach places, hot or hazardous areas using the built-in laser pointer to target the surface. Compact and easy to use, the thermometer can provide several readings within seconds. Backlighting illuminates the LCD display for taking measurements at night or in low light areas. Carry case included.



NON-CONTACT THERMOMETER WITH DUAL LASER TARGETING

- Laser pointing targeting
- Wide temperature range
- 12:1 Distance to spot ratio
- Backlit LCD
- Holster Included



Measure the temperature of any surface from a safe distance with this compact sized non-contact thermometer. With a wide temperature range and laser targeting, this portable instrument is easy to use for quick and accurate temperature checking of any surface. With a 11:1 distance to spot size, you can get the temperature of almost the exact spot in most cases. With the backlight, the temperature can be read in low light conditions.



PROFESSIONAL HIGH TEMPERATURE NON-CONTACT THERMOMETER

- Backlit LCD
- Professional grade
- Wide temperature range
- 30:1 distance to spot ratio
- Auto data hold
- Moulded carry case



This professional infrared thermometer allows you to measure high temperatures with safety. With a range of -50 to 1000° Celsius, it's suitable for lab, furnace, forge and small-scale foundry work. The laser pointer allows for accurate placement of the measurement point and the 30:1 distance-to-target ratio allows for accurate measurement from greater distances. The unit can be mounted on a tripod with trigger lock for unattended min/max logging.



- Supplied in a robust blow-moulded case

Specifications	QM-7215	QM-7221	QM-7226
Display	3 digit	3.5 digit	4.5 digit
Optical resolution	8:1	11:1	30:1
Temperature	-30°C to +260°C (-22° to +500° F)	-50°C to +650°C / -58°F to +1202°F (±1%)	-50°C to +1000°C / -58°F to +1832°F (±1.5%)
Emissive	Fixed to 0.95	Adjustable 0.10 to 1.0	Adjustable 0.10 to 1.0
Sampling rate	< 1s	6.7Hz	1Hz
Special features	Built-in laser pointer, automatic data hold, backlight, min / max record, over range indicator	Dual laser targeting, dual display, automatic data hold, backlight, trigger lock, max hold, high/low alarm	Laser targeting, automatic data hold, dual display, backlight, trigger lock, min / max / dif / avg record, high / low alarm.
Battery	1 x 9V	1 x 9V	1 x 9V
Dimensions	131(H) x 96(W) x 35(D)mm	146(L) x 104(W) x 43(D)mm	230(L) x 120(W) x 56(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7215	\$54.95	\$49.45	\$43.90

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7221	\$119.00	\$106.95	\$94.95

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7226	\$199.00	\$178.95	\$158.95

TECH TALK!

Distance to spot ratio is the ratio of the distance of the Thermometer to the object being measured, and the diameter of the temperature measurement area. The larger the ratio number the better the resolution.

LET'S FIND EVERYTHING YOU NEED!

FROM
\$159.00
DC-1065



MOBILE COMMS

P280

FROM
\$5.95
QM-7316



DESK THERMOMETERS

P269

FROM
\$94.95
XC-0400



WIRELESS WEATHER STATIONS

P266

FROM
\$89.95
XC-0430



DIGITAL RAIN GAUGE

P270

TEMPERATURE MEASUREMENT

NON-CONTACT THERMOMETERS (CONTINUED)

MINI NON-CONTACT IR IP67 THERMOMETER

- Batteries and lanyard included

Ultra compact, non-contact thermometer. IP67 rated so is ideal for industrial and lab applications. LCD readout gives temperature in Celsius or Fahrenheit.

Specifications	QM-7218
Temperature	-33 to +110°C (-27 to +230°F)
Accuracy	2.5°C
Distance to spot ratio	1:1
Response time	1 second
Size	82(L) x 17(Dia)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7218	\$29.95	\$26.90	\$23.70

DIGITAL THERMOMETER WITH K-TYPE THERMOCOUPLE

- LCD
- Pocket Size
- Wide Temperature Range
- Thermocouples & Battery included

A handy pocket-size digital thermometer, suitable for the lab, workshop or in the field. It features an excellent measurement range from -50 to 750°C and a hold function to lock the reading on the display.

Specifications	QM-1602
Display	2000 count
Temperature	-50°C to +750°C (±1%)
Sampling rate	2.5Hz
Special features	Data hold
Battery	1 x 9V
Dimensions	118(L) x 70(W) x 29(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1602	\$39.95	\$37.45	\$31.90

TECH TALK!

Distance to spot ratio is the ratio of the distance of the Thermometer to the object being measured, and the diameter of the temperature measurement area. The larger the ratio number the better the resolution.

PROBE THERMOMETERS

LCD PROBE THERMOMETER

- Pocket clip
- Stainless steel probe
- 150mm long



Multi-purpose digital thermometer for the kitchen, lab, factory, workshop or barbeque. It measures in Celsius and Fahrenheit and fits in a pocket.

Specifications	QM-7314
Temperature	-50 - 120°C, -58 - 248°F
Accuracy	+/-1°C
Length	150mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7314	\$9.95	\$9.25	\$7.75

DIGITAL STEM THERMOMETER

- Requires LR44 battery (included) / 5000 hour battery life
- 205mm long



Endless applications such as food processing, laboratory work, photography, home brewing etc. this digital thermometer features fast response, min/max memory, data hold and automatic shut-off after 10 minutes. The probe is stainless steel, so it will never corrode, the body is splashproof and it will never need calibration.

Specifications	QM-7216
Temperature	-50 - 200°C / -58 - 392°F
Accuracy	±1°C, ±2°F
Display resolution	0.1°
Sampling rate	Every 0.7 seconds



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7216	\$24.95	\$22.35	\$19.70

THERMOCOUPLE THERMOMETER - 2 INPUT

- Auto power off
- Backlit LCD
- Max and hold function
- Celsius & Fahrenheit
- Holster included
- Thermocouples included



Fast response and laboratory accuracy, works with K-type thermocouples and offers 0.1 or 1° user-selectable resolution over the entire measurement range. You can monitor two separate temperatures or use the differential function to compare them.

Specifications	QM-1601
Display	2000 count
Temperature	-50°C to 1300°C (-58°F to 2000°F)
Special features	Backlight, data hold, max hold
Battery	1 x 9V
Dimensions	172(L) x 84(W) x 42(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1601	\$79.95	\$74.95	\$63.95

FRIDGE THERMOMETERS

DIGITAL FRIDGE/FREEZER LCD MINI THERMOMETER

See at a glance that your favourite food or beverage is at the correct temperature in the fridge or freezer. Hang it from a wire shelf, stand on a shelf or attach to a metal surface with the built-in magnet. Stylish design with white face and silver colour surround.

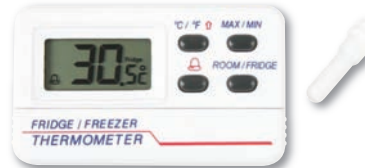


- Selectable °C / °F
- Digit height: 23mm
- Temperature range: -19°C to 49°C
- Batteries: 1 x CR2025 included
- Dimensions: 68(L) x 44(H) x 12(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-6323	\$9.95	\$8.75	\$7.75

DIGITAL THERMOMETER FOR FRIDGE OR FREEZER

Keep your fridge at the right temperature all year round. Simply attach the sensor to the desired position in the fridge or freezer and the thermometer on the outside with the attached magnets or enclosed Velcro strip. Set your preferred reading of °C or °F and then set the minimum and maximum temperatures with the alarm. If the fridge goes below or above these set temperatures the alarm will sound until you manually turn it off to investigate the problem. No more spoiled food ever again. Shows room temperature at the touch of a button as well.



Specifications	QM-7209
Room temp range	-10 to 50°C
Fridge temp range	-50 to 70°C
Display size	26(W) x 13(H)mm
Fridge sensor cord	1m
Requires	1 x AAA battery (supplied)
Dimensions	67(W) x 39(H) x 15(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7209	\$19.95	\$17.70	\$15.70

RAINCHECK!

If your local Jaycar store has sold out of a currently advertised line we will be happy to issue you with a 'raincheck'.
Conditions apply - see page 528 for details.

SOUND LEVEL METERS

MICRO SOUND LEVEL METER

- Very compact size
- Min / max hold
- Backlit



With a range of 40 - 130dB, this little meter is ideal for environmental, safety and sound system testing. It has a fast response time for transient measurements and is A-weighted for the frequency range of human hearing. Extremely small and price matches its size.



Specifications	QM-1591
Display	3 digit
Range	40 - 130dB (± 3.0 dB)
Frequency range	31.5Hz to 8kHz
Weighting	A weighted
Special features	Pocket sized, min / max hold, backlight
Battery	1 x 9V (included)
Dimensions	128(L) x 51(W) x 32(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1591	\$39.95	\$35.90	\$31.90

COMPACT DIGITAL SOUND LEVEL METER

- Compact size
- Data hold
- Backlit
- Carry case



Featuring a wide dynamic range from 30 to 130dB, it can measure both A and C weightings to get the right response for the human ear and can have fast or slow responses to get an "ambient" reading or a short noise. Includes data hold and min/max functions, as well as tripod mount for prolonged use. Great for car audio installers, clubs and PA. Supplied with carry case and wind sock.



Specifications	QM-1589
Display	3.5 digit
Range	30-130dB (± 1.5 dB)
Frequency range	31.5Hz to 8kHz
Weighting	AC selectable weighting
Response	Fast / slow selectable
Special features	Max hold, data hold, backlight
Battery	1 x 9V
Dimensions	210(L) x 55(W) x 32(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1589	\$99.95	\$89.95	\$79.95

PRO SOUND LEVEL METER WITH CALIBRATOR

- Compliant with Type 2 (Class 2) Standards
- A & C weighting scales
- Fast and slow response
- Tripod mounting thread
- External calibrator (included)
- Maximum hold feature
- Min/Max measurement
- AC & DC analogue outputs
- Tripod included
- Backlit LCD



TECH TALK!
Approved Type 2 (Class 2)

DID YOU KNOW?
This meter conforms to IEC 61672-1 Class 2 for sound level meters.



NEW LOW PRICE



Suitable where accuracy, repeatability or validation is required. This sound level meter also includes a calibrator so you can verify and authenticate your results. Scales for A and C weighting are included so it is ideal for vehicle noise testing, race scrutineering, traffic or aircraft noise testing or any evidence-based noise testing. Rugged and easy to operate for the garage environment, it also has both AC (1Vrms representation of the meters waveform) and DC (10mV/dB) analogue outputs so you can connect it to other equipment such as data-loggers, plotters, oscilloscopes etc.

Specifications	QM-1592
Display	3.5 digit
Accuracy	± 1.4 dB
Calibration	94, 114dB
Dynamic range	50dB
Resolution	0.1dB
Update	Every 0.5 seconds
Frequency range	31.5Hz - 8kHz
Dimensions	278(L) x 76(W) x 50(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1592	\$349.00	\$315.00	\$279.00

CABLE TESTER

ROADIES CABLE TESTER

Simply plug the cable under test and turn the rotary switch. The LED array gives you an instant go/no-go status of each conductor path in the cable. With bullet-proof all-metal construction, it's ideally suited to the ruff and tumble world of rock 'n' roll, but is also suitable for any technician working with cables. Faster and much easier than a multimeter. Requires 1 x 9V battery. (use SB-2423)

Tests the following cables:

- Speakon 4, 8P
- 1/4" mono & TRS
- DIN 3, 5, 7, 8P
- XLR 3, 5P
- Phono (RCA)
- USB
- RJ45
- Dimensions: 190(L) x 98(W) x 35(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0405	\$59.95	\$53.95	\$47.90

LIGHTMETERS

DIGITAL LIGHTMETER

- LCD
- 3.5 Digit
- 4 Ranges
- 0.01 to 50,000 Lux
- Carry Case
- Separate Photo Detector



A handy digital lightmeter for photography, lab work, architectural, engineering and construction applications. It includes an integrated stand and will measure incident light in 4 ranges.

The photo detector is wired on a curly cord which extends to 1 metre, allowing the user to take light measurements at the optimum position. Sensor cover included..

Specifications	QM-1587
Display	2000 count
Range	200, 2000, 20000, 50000 lux/Fc
Accuracy	± 5% ± 10d (< 10,000lux) ± 10% ± 10d (> 10,000lux)
Resolution	0.1lux/Fc
Sampling rate	1.5Hz
Special features	Data hold, max hold
Battery	1 x A23 (12V)
Dimensions	188(L) x 64(W) x 24.5(D)mm
Photo detector	115(L) x 60(W) x 27(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1587	\$49.95	\$44.90	\$39.90

LASER DISTANCE MEASURING

PROFESSIONAL LASER DISTANCE METER

- LCD
- 35m



A professional grade laser distance meter brimming with features. It allows you to easily measure the distance between two points, it can calculate the area of a rectangle or the volume of a cube with ease. You can measure the height of a wall thanks to the inbuilt Pythagoras calculator. Measurements can be added or subtracted from each other using the plus and minus buttons.

- Carrying pouch included

Specifications	QM-1622
Measurement range	0.05 to 35m
Accuracy	+/-1.5mm
Smallest unit displayed	1mm
Measuring units	m, in, ft
Laser class	Class II 635nm < 1mW
Batteries	Requires 2 x AAA
Rating	IP54
Measurement records	20
Dimensions	110(L) x 45(W) x 27(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1622	\$139.00	\$124.95	\$110.95

PROFESSIONAL DIGITAL LIGHT METER

- Data hold
- Relative mode
- Auto zeroing
- Long-life silicon photo diode sensor
- Selectable Lux or fc scale
- Auto power off: 30 minutes
- Max and min measurements



Light has an enormous impact on the atmosphere created in a room, office, foyer, retail shop, reception areas, or on film and photography. In some cases, a professionally lit servicescape may be the difference between business success and failure. Achieving the right amount of light is a fine art, and the help of a professional tool should be sought to ensure minimum lighting level standards are achieved. This professional light meter is brimming with features that should be part of every lighting technician's arsenal. It uses photopic spectral sensitivity which closely mimics the response of the human eye to changes in light. It is extremely accurate with a rapid response and can store min and max values for easy comparisons. Measurement can be switched between LUX and FC (foot candles) and a data hold function is included for pausing the reading. All this is output to an easy to read backlit LCD. A carry plastic case with handle is included for easy and safe transportation.

Specifications	QM-1584
Display	4,000 count with 41 segment bargraph
Max measurement	400,000lux / 40.00 kFc
Spectral response	CIE Photopic
Spectral accuracy	CIE VA function f1 <= 6%
Cosine response	f2 <= 2%
Accuracy	+/-5% +/-10d (< 10,000 lux), +/-10% +/-10d (> 10000 lux)
Accuracy for C.I.E. standard illuminance	A(2856K)
Sampling rate	1.5 times/second

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1584	\$129.00	\$115.95	\$102.95

PROFESSIONAL LASER DISTANCE METER WITH SMARTPHONE APP

- MeterBox app available for Android and iOS devices.
- Auto laser off after 30 secs/ instrument switch-off after 3 mins
- LCD
- 70m
- Spirit level
- Smartphone App



An advanced professional laser distance meter which can be paired with a Smartphone adding greater functionality. The unit will measure distance, area, volume, Pythagoras and tilt angle with ease, and will store the last 20 measurements. You can add measurements together or subtract from one another. The Smartphone app (MeterBox) allows you to store recorded data on your phone and share it with colleagues over the cloud, and even allows you to take a picture of what is being measured and overlay the measurements on the picture. Also includes a tripod thread for mounting to most camera stands.

Specifications	QM-1624
Measuring Range	0.05 to 70m
Accuracy	+/-1.5mm
Measuring units	metres, inches, feet
Tilt sensor measuring range	+/-65 degree
Measurement history	20 records
Batteries	Requires 2 x AA
Dimensions	134(L) x 52(W) x 30(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1624	\$209.00	\$187.95	\$166.95

VERNIER CALIPERS

BUDGET 150MM DIGITAL VERNIER CALIPERS

This carbon composite digital caliper is ideal for general use and situations where the cost of our precision stainless steel tool isn't justified. The digital display is calibrated in imperial and metric units with a corresponding vernier scale etched onto the caliper slide. While we wouldn't recommend you use this caliper to build the Space Shuttle, it's perfectly suited to the home handyperson who finds traditional calipers hard to read.

- 150mm measurement range
- 0.1mm resolution
- 8.3mm LCD character height
- 245mm Overall length (closed)
- Internal and external jaws
- Includes 1 x SR44 battery



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2081	\$10.95	\$9.75	\$8.75

150MM DIGITAL VERNIER CALIPERS

This precision instrument is made out of surgical grade stainless steel. It features a 5 digit LCD and will show readings in metric - 3 significant figures plus 2 decimal and in imperial - 2 significant figures and would you believe 3.5 decimal. (The fourth figure is either 0 or 5). The caliper can be zeroed at any point on the scale. A quality product at a fabulous price. Supplied with a sturdy clip-lock case with foam retainer and provision for spare battery.

- 0 - 150mm (0-6") range
- Resolution 0.01mm / 0.0005" (repeatability same)
- LR-44 battery powered (supplied)
- Battery life 12 months nominal
- Auto power off
- Operating temperature 0 - 40°
- Thumbscrew slide damper
- Case dimensions 250(L) x 90(W) x 27(D)mm.
- Converts millimeters to inches and vice versa



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2082	\$34.95	\$31.45	\$27.90



STUD DETECTORS

3 IN 1 STUD DETECTOR WITH LCD SCREEN

Survey your wall with ease by sliding this handheld detector along the surface. With separate modes to sense wall studs, mains cables, and metal items this handy device allows you to locate and mark items hidden within a wall before cutting or drilling. Object detection is indicated by a buzzer and on the LCD screen, with the screen display including a numerical and barograph reading of the detection intensity. With repeated sweeps of a wall section you can use the screen reading to get the precise location of the detected item.

- Automatic calibration
- Requires 9V battery
- Dimensions: 150(H) x 67(W) x 28(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2283	\$29.95	\$26.90	\$23.70

3 IN 1 STUD DETECTOR WITH LASER LEVEL

Stud detectors have been around for a long time but sometimes one appears which becomes a definite buy for any serious handyman. This model is one of those! Featuring a stud detector which just doesn't "beep" when you're over the stud, it shows the proximity when you are NEAR a stud via the large LCD and shows a target graphic when you're spot on. Also featuring live wire (voltage) detection, you can be sure than nail you're about to hammer into the wall won't end up in your mains wiring.

The best feature of all is the built in laser level. Rotating across 180 degrees with stops on 45 and 90°, you can instantly and easily do layouts and basic tasks such as picture levelling in a snap. The inbuilt spirit level ensures you're at the right angle.

- Laser levelling, layout and stud locating on vertical and horizontal surfaces.
- Wood, metal and live wire detection.
- 180° pivoting laser plane with level and plumb vials
- 20' laser line projections onto work surface with 90° squaring
- Two self contained half pins to mount unit to work surface
- LCD sensing and mode display with target graphics
- LED display with continuous live wire detection
- Thumb dial adjustable feet for levelling the laser
- Easy keypad operations and comfortable grip
- Powered by 9V Battery (included)
- Size: 180(H) x 67(W) x 38(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2288	\$59.95	\$53.95	\$47.90

WEIGHING SCALES

DIGITAL LUGGAGE SCALE

Some budget airlines are now charging \$60 (yes, \$60!) per kilo for excess baggage, and reducing the allowance to as little as 15kg. If you're going travelling, especially anywhere in Europe, an accurate luggage scale should be considered an essential. It costs less than a third of a kilo of Ryanair excess baggage charges and the scale itself weighs only 160g. It also takes two common AAA batteries you can get anywhere in the world.



Luggage not included

- Capacity: 40kg
- Backlit LCD
- Tare and auto-off
- Overload and low battery indication
- Size: 122(L) x 85(H) x 25(W)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7232	\$19.95	\$17.70	\$15.70

100G MINI-POCKET SCALE

Truly pocket-size scales. Ideal for laboratory, diets, clinical, jewellery or lapidary work. They'll measure up to 100 grams with excellent resolution and weigh in grams, carats, pennyweight or ounces. 1 x CR2032 battery included.

- 60 second auto power-off
- Tare function
- 0.01g resolution
- Dimensions: 72(L) x 40(W) x 10(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7258	\$49.95	\$44.90	\$39.90

200G MINI-SCALE WITH BACKLIGHT

Extremely accurate mini scale suitable for a variety of applications. The large LCD is backlit and a 200g calibration weight is included. Resolution is 0.01g and it weighs in grams, carats, ounces and pennyweight.

- 2 x AAA batteries included
- Dimensions: 93(L) x 52(W) x 20(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7259	\$69.95	\$62.95	\$55.95

1KG DIGITAL BENCH SCALE

Precision 1kg electronic scale with resolution of 0.01g for when a high degree of accuracy is required. Weighs in grams, ounces, pounds, grains, carats, troy ounces and also supplied with a wind shield and a built-in bubble level to provide maximum accuracy. Particularly suited to calculating quantities as it counts pieces by weight. Powered by 4 x AA batteries (not included) or mains adaptor. Suitable for kitchen, lapidary, jewellery, reloading etc.

- Auto power-off after 60 seconds
- Automatic calibration
- Backlit LCD
- Tare and counting function
- Mains powered
- Dimensions: 175(W) x 75(H) x 260(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-7264	\$159.00	\$142.95	\$126.95

OTHER TEST EQUIPMENT

POCKET MOISTURE METER - WOOD & BUILDING

This is an intelligent wood moisture meter suitable for measuring water content in building materials and wooden fibre articles such as wooden and bamboo objects, cotton, paper etc. Simple to use, the unit comes with two-pin electrode which enables you to check thick wood at the core without having to cut it open. A must have for home/building inspectors, flooring specialist and general contractors. Carry case included.

- Backlit digital LCD screen
- Ergonomically designed with comfortable finger grip
- Wide measurement scope (6% to 44%)
- Low power consumption
- Auto power off

Specifications	
Electrode length	8mm
Measuring range	Wood: 6 to 44%, Material: 0.2 to 2.0%
Accuracy	Wood: +/-2%, Material: +/-0.2%
Ambient temperature	0 to +40°C
Ambient humidity	0 to +85%RH
Battery	4 x LR44 (included)
Dimensions	96(H) x 40(W) x 20(D)mm
Weight	83g



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2310	\$29.95	\$26.95	\$23.70

HAND HELD PH METER

A simple and accurate device for checking pH levels in water. The unit is equally valuable for keeping your fish tank at the proper pH level for optimum fish health or checking your swimming pool for the right balance. The meter is simple to use and the large liquid crystal display gives clear and precise readings that are much more accurate than messy chemicals. The unit has an extendable probe that can be adjusted to suit each application. The meter is supplied with a 9 volt battery, a bottle of pH 7.0 buffer solution and calibration tool.

Specifications	
Range	1 - 14 pH
Resolution	0.1 pH
Accuracy	±0.2 pH
Operating temperature	0° - 50°C
Weight	120g
Dimensions	40(W) x 158(H) x 34(D)mm



⬆	Cat.	Qty 1+	Qty 3+	Qty 6+	
	pH Meter	QM-1670	\$64.95	\$58.50	\$51.95
	Buffer Solution (50ml)	QM-1671	\$8.95	\$7.95	\$6.95

COUNTERS

HANDHELD/DESK MOUNTED TALLY COUNTER

This tally counter is ideal for checking attendance numbers at large events, counting inventory or making sure tour participant numbers are correct. Made from chrome plated aluminium, it is easily removed from its base to comfortably fit into the palm of your hand. The base can also be mounted on a desk or other surface for convenience. A gentle push of the thumb counts from 0-9999. To reset the counter, just wind the knob back to 0000.

- 60(H) x 57(D) x 57(W)mm

TECH TALK!
Removable Base
For Handheld Use



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TC-2500	\$12.95	\$11.35	\$10.35

PLUG-IN ENVIRONMENT SENSORS FOR SMARTPHONES WITH APP

Turn your Smartphone into a pocket environment meter. Choose between four plug-in sensors that plug into the Smartphone's earphone socket to measure radiation, UV index, electromagnetic fields or temperature & humidity. By using a free downloadable APP for your iOS® and Android® device, you can see real time measurements or trigger an alarm when a pre determined measurement is reached. Intended for domestic use and readings, should only be used as a guide.



NEW
2015

Note: Smartphone
not included

PLUG-IN GEIGER MODULE FOR SMARTPHONES - CAT. QM-1676

Measures radiation coming out from a radioactive substance in dose-rate figure (uSv/h) and sound an alarm at a preset level.

Specifications	QM-1676
Measurements	Gamma, X-ray
Measuring range	0.1-200uSv/h
Measurement error	< ±15%
Operating temperature	10-40°C
Dimensions	47(L) x 10(Dia.)mm, 6g



PLUG-IN UV MODULE FOR SMARTPHONES - CAT. QM-1677

Returns the UV index and power. Set the UV Index alarm to remind you to put on some sun block.

Specifications	QM-1677
Measurements	UV (Ultraviolet)
Range	240 - 380nm
Detects	UVA, UVB
UVI (UV Index) range	0 - 12
UV Power	0 - 6mW/cm2
Measurement error	± 10%
Workable temperature	-20 - 50°C
Workable humidity	< 80%
Sensor type	Semiconductor sensor
Dimensions	30(L) x 10(Dia.)mm, 6g



PLUG-IN ELECTROMAGNETIC SENSOR FOR SMARTPHONES - CAT. QM-1678

Measures the electromagnetic waves around on your Smartphone in V/m (Volt/Metre) in real time.

Specifications	QM-1678
Measurements	Electromagnetic field (EMF)
Minimum response	1V/m
Range	1 - 2,000V/m
Frequency	16Hz - 100kHz
Dimensions	30(L) x 10(Dia.)mm, 6g



PLUG IN TEMPERATURE AND HUMIDITY SENSOR FOR SMARTPHONES - QM-1679

Take temperature and humidity readings inside or out.

Specifications	QM-1679
Measurements	Temperature & humidity
Temperature range	-40°C to 120°C
Temperature step	0.1°C
Temperature error	± 0.5°C
Temperature measure time	15sec
Humidity range	0 - 100%
Humidity step	1%
Humidity error	± 2.5%
Humidity measure time	10sec
Dimensions	30(L) x 20(Dia.)mm, 10g



Note: Colours may vary to ones shown

↑	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Geiger Module	QM-1676	\$34.95	\$31.45	\$27.90
	UV Module	QM-1677	\$34.95	\$31.45	\$27.90
	Electromagnetic Sensor	QM-1678	\$34.95	\$31.45	\$27.90
	Temperature and Humidity Sensor	QM-1679	\$34.95	\$31.45	\$27.90

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\$9.95
PP-2142



ALTERNATOR BATTERY MONITOR P231

FROM
\$59.95
QM-1494



MULTIFUNCTION AUTO TESTER P232

FROM
\$79.95
QM-1448



DIGITAL TACHOMETER P232

FROM
\$15.95
QP-2212



AUTO TESTER P232

INSPECTION CAMERAS

USB MINI INSPECTION CAMERA WITH 1.5M FLEXIBLE CABLE

Inspect areas your head or hands simply can't fit into and your limited human eyes can't see. Ideal for finding dropped screws/bolts, seeing inside car engine bays, checking inside pipes, under grates, up rangehoods, in ceilings, and much more. This unit comes with three brilliant add-ons, a hook, a magnet, and a 45 degree mirror that can be attached to the end of the camera to help you retrieve those important bits. There are 4 white LEDs at the front of the camera that can have their brightness adjusted with a dial fused onto the cable. With the supplied software you can also capture video and images for playback at a later date. Requires no batteries, just connect to your laptop and start viewing.

- Water resistant camera head and cable
- 4 White LED Lights (brightness adjustable)
- Compatible with Windows XP, Vista, 7, 8

Specifications	QC-3373
Flexible cable neck diameter	5mm
USB cable	USB2.0
Camera head outer diameter	10mm
Resolution	640x480
Lens view angle	54 degrees
Focal distance	6cm-infinite
Frame rate	up to 30fps @ 640x480
Length	1.5m

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3373	\$44.95	\$40.45	\$37.95

USB MINI INSPECTION CAMERA WITH 7M FLEXIBLE CABLE

A water resistant inspection camera with a massive flexible 7m cable so it will remain rigid allowing you to probe into all sorts of areas. A magnet, hook, and 45 degree mirror attachment are included to enhance the camera's ability to retrieve impossible to get bolts, or other pieces of equipment. Just plug it into your laptop and view the camera live, record videos, and take snapshots for later use.

- Water resistance camera head and cable
- 4 white LEDs (brightness adjustable)
- Compatible with Windows XP, Vista, 7, 8

Specifications	QC-3374
Camera head outer diameter	10mm
Resolution	640x480
Lens view angle	54 degrees
Focal distance	6cm-infinite
Frame rate	Up to 30fps@640x480
Length	7m

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
7m	QC-3374	\$64.95	\$58.50	\$54.95

WI-FI INSPECTION CAMERA TO SUIT AN IPHONE®

Inspection cameras are often restricted by a fixed screen. This reduces the flexibility and range of objects you need to get a close look at. This inspection camera overcomes these limitations by using your iPhone® as the screen. It gives you a new level of freedom for finding a pesky screw that's dropped into your engine bay, or for simply seeing between cracks or inside dark confined spaces. You can use it wirelessly thanks to the internal rechargeable battery or wired with the supplied mains to mini USB adaptor. The flexible gooseneck can be bent and twisted to be able to see just about anywhere.

The camera itself creates an open Wi-Fi network, simply connect to it with your phone, grab the app and start viewing close-ups. Couldn't be easier! The camera lens is lined with 4 white LEDs with adjustable brightness. An iPhone® 3/4 and 5 brackets are included so you can lock your phone into position on the handle if needed. Two camera clip add-ons are included, a small hook for picking up objects, and a magnet for retrieving that lost screw or nut. A absolute godsend for anyone who has dropped a water pump bolt down a shaft that no human finger could reach.

IS Cam app available on the app store.

Specifications	QC-3351
Suitable for	iPhone® 3/4/5
Camera type	1/8" Colour CMOS
Rating	IP67
Camera sensor	1M
Resolution	640x480 VGA
Video frame rate	30fps
Video format	MJPEG
Picture format	JPG
Viewing angle	60 degrees
Camera illumination	4 LEDs (white, adjustable)
Wi-Fi	802.11b/g/n
Transmission range	50m (clear sight)
Flexible gooseneck length	685mm
Handle dimensions	180(L) x 45(W) x 50(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3351	\$119.00	\$106.95	\$100.95

Note: iPhone® not included

NEW LOW PRICE

1 YEAR WARRANTY

INSPECTION CAMERAS WITH CCTV FIELD MONITORS

INSPECTION CAMERA WITH 2.4" LCD

With a camera diameter of only 9mm, detailed inspection of some very tight spots is possible. Its comfortable grip and forward facing controls make it easy to detect and diagnose the inaccessible. 9mm camera head for up-close visual inspections in tight spaces. Requires 4 x AA batteries.

- Forward facing controls
- Adjustable brightness LED illuminator
- Adjustable LCD brightness



Specifications	QC-8710
Sensor	CMOS
Display	2.4" colour LCD
Resolution	480 x 234 pixels
Reach	1m
Attachments	Mirror, hook & pick-up magnet

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Inspection Camera	QC-8710	\$129.00	\$115.95	\$109.95
Extension Shaft 2m	QC-8702	\$79.95	\$71.95	\$67.95

INSPECTION CAMERA WITH RECORD & DETACHABLE WIRELESS SCREEN

With a 9mm diameter and four LEDs, the head of this inspection camera can capture video and pictures in confined and dark locations. The head and flexible boom being IP67 rated enables them both to be submerged in water during operation (however the base unit and LCD cannot get wet! Caution!). Included is a 2GB microSD card on which video and pictures can be recorded. These files can then be viewed on a TV with the included Video out cable or saved onto a PC via the USB cable included. The 3.5" LCD is detachable from the handle, which receives a wireless transmission from the camera. This enables more flexibility during operation, i.e. you can hold and manoeuvre the camera with one hand whilst keeping the LCD in full view in the other hand all the time. It makes operation easier.

- 2GB microSD card included (accepts up to 16GB)
- IP67 rated camera and flexible boom
- 4 white LEDs
- Three useful accessories - hook, mirror, magnet.
- Strong plastic carry case
- 4 x AA batteries required for camera handle
- USB cable included
- Video out cable included
- Power supply 5VDC 1A included



Dimensions	
Monitor	100 x 70 x 25mm
Camera Diameter	9mm
Camera handle	86 x 145 x 41mm
Flexible boom	1m

Specifications	QC-8712
Photo & Video resolution	640 x 480
Video memory usage approx.	27MB/min - With 2GB microSD card approx.
Photo memory usage approx.	75KB - With 2GB microSD card approx.
LCD	3.5"
Wireless transmission frequency	2.4GHz
Lithium-ion battery in LCD	3hour Charge, 2 hour usage.

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Inspection Camera	QC-8712	\$279.00	\$255.00	\$239.00
Extension Shaft 2m	QC-8702	\$79.95	\$71.95	\$67.95

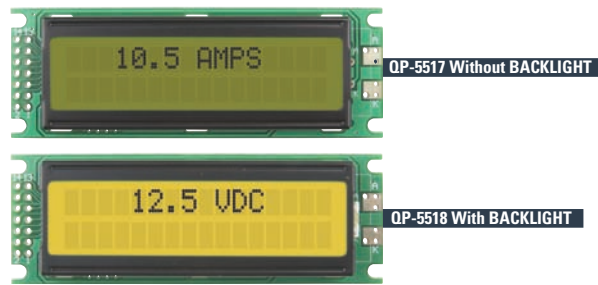
1 YEAR WARRANTY

1 YEAR WARRANTY

LCD DISPLAYS & PANEL METERS

LCD MODULES

LCD PANEL 2 LINE 16 CHARACTER - WIDE VIEWING ANGLE



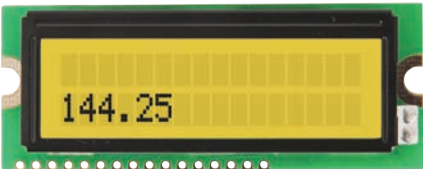
Actual stock will vary from photographs

Specifications	QP-5517 / QP-5518
Type	2 line LCD
Characters	16 x 2 lines
Character size	4.89 x 2.78mm
Viewing angle - vertical	Sym 0 condition: CR>=2°, Min -10° Max 40°
Viewing angle - horizontal	Sym 0 condition: CR>=2°, Min -30° Max 30°
Supply voltage for logic	SYN: VDD - VSS Min 4.5V Typ 5V Max 5.5V
Other mechanical data	STN, yellow green, 1/16 duty, 6 o'clock
Module dimensions	85(W) x 30(H) x 13.2(D)mm
Viewing display area	65(W) x 16(H)mm

	Cat.	Qty 1+	Qty 10+	Qty 25+
Without Backlight	QP-5517	\$9.95		
With Backlight	QP-5518	\$14.95	\$13.35	\$10.35

LCD PANEL 2 LINE 16 CHARACTER COMPACT WITH BACKLIGHT & SIL CONNECTIONS

This compact LCD module has 96 inbuilt ASCII characters as well as 92 special letters and 8 custom characters, which can be displayed on a 16 character by 2 line screen. It will hold the current input on the display using its own built in memory, making it easy to drive. Connections via single in line solder pads with an independent backlight.



Specifications	QP-5512
Type	2 line LCD
Characters	16 x 2 lines
Character size	4.89 x 2.78mm
Viewing angle - vertical	Sym 0 condition: CR>=2°, Min -10° Max 40°
Viewing angle - horizontal	Sym 0 condition: CR>=2°, Min -30° Max 30°
Supply voltage for logic	5VDC
Other mechanical data	Power supply current: 2mA, Duty: 1/16
Module dimensions	66(W) x 26(H) x 12(D)mm
Viewing display area	51(W) x 14.8(H)mm

	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5512	\$19.95	\$17.70	\$15.70

DOT MATRIX LIQUID CRYSTAL DISPLAY MODULES ALPHANUMERIC

Compact Liquid Crystal Diode module with ASCII (96 characters), Special Letters (92 characters) and Custom Letters (8 characters). A two line screen displays up to 16 characters at a time and the module will hold the current display in its own inbuilt memory.



Specifications	QP-5515/QP-5516
Type	Alphanumeric, 2 line LCD
Characters	16 x 2 lines
Character size	4.89 x 2.78mm
Viewing angle - vertical	Sym 0 condition: CR>=2°, Min -10° Max 40°
Viewing angle - horizontal	Sym 0 condition: CR>=2°, Min -30° Max 30°
Supply voltage for logic	SYN: VDD - VSS Min 4.5V Typ 5V Max 5.5V
Other mechanical data	STN, yellow green, 1/16 duty, 6 o'clock
Module dimensions	85(W) x 30(H) x 13.2(D)mm
Viewing display area	65(W) x 16(H)mm

	Cat.	Qty 1+	Qty 10+	Qty 25+
Without Backlight	QP-5515	\$15.95	\$14.35	\$10.95
With Backlight	QP-5516	\$17.95	\$15.95	\$12.35

FLOW RATE METERS

ELECTRONIC FLOW RATE METER

Completely self-contained, this unit only measures 60 x 40mm and includes a full LCD information display. It's supplied with a reed switch and piezo alarm. It operates from 2 x AAA batteries and a battery holder is included. The alarm signal can be used to trigger another slave device. As it goes up to 99,500 litres, it could be used in larger-scale applications such as irrigation or just to let you know when it's time to clean a filter. It also reads flow rate, will remember data and operate in time mode.

- Dimensions: PCB/LCD: 60(L) x 40(W)mm

NEW LOW PRICE

MORE INFO WEB



	Cat.	Qty 1+
	ZD-1204	\$14.95

PANEL METERS - MU45

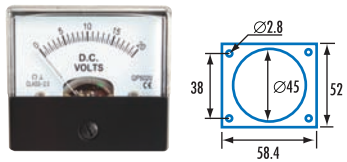
PANEL METERS STYLE MU45 - MOVING COIL TYPE

Overall Dimensions: 58(W) x 52(H)mm.

- Mounting hole centre 38 x 38mm
- 45mm meter hole
- MU45
- Class 2.5



Cat.	Coil Resistance	Scale
QP-5010	200 Ω	0-1mA
QP-5012	3,000 Ω	0-50μA
QP-5013	0.05 Ω	0-1A
QP-5014	0.01 Ω	0-5A
QP-5015	0.005 Ω	0-10A
QP-5016	0.003 Ω	0-20A
QP-5020	20,000 Ω	0-20V
QP-5022	30,000 Ω	0-30V



	Cat.	Qty 1+	Qty 3+	Qty 6+
	Any of the above	\$17.95	\$15.95	\$14.35

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TH-1987

SERVICE AIDS P177

FROM \$43.95
PB-8816

BREADBOARDS P25

FROM \$0.85
HH-8502

HEATSINKS P113

FROM \$3.75
HP-1174

TRANSISTOR INSULATORS P78

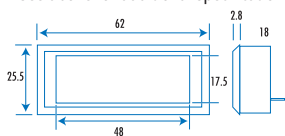
PANEL METERS

Common Specifications for QP-5570, QP-5580 & QP-5585:

Polarity	Automatic (-) for negative value
Decimal point	User selectable
Input	Analogue
Full scale range	200mV
Configuration	True differential input and reference
Impedance	10MΩ
Conversion rate	2.5 per second
Zeroing	Automatic
Operating temp	Standard 0 to 50°C

3.5 DIGIT LCD PANEL METER

- Attractive modern bezel
- Snap retaining into panel
- Shallow depth
- 0.1" launcher connections
- See above for additional specifications

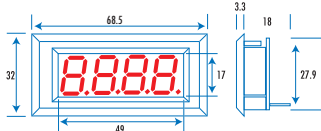


Specifications	QP-5570
Type of display	LCD
Digits	3 1/2 digits (1999) 12.7mm figure height
Power	5V powered
Over range	Display flashes "1"
Accuracy	±(0.1%rdg. + 1dgt.)
Connection	13 pins
Size	62(W) x 25(H) x 15(D)mm
Panel cutout	60.5(W) x 24(H)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5570	\$27.95	\$24.95	\$22.35

3.5 DIGIT LED PANEL METER

- Surface mount construction for reliability
- 0.1" launcher connections
- Brightness matched superbright LEDs
- Attractive bezel with mounting clips
- 5V powered, TTL compatible common ground
- See above for additional specifications

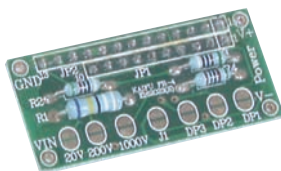


Specifications	QP-5580
Type of display	LED, red super bright
Digits	3 1/2 digits (1999) 14.2mm figure height
Power	5V powered, common ground
Over range	Display blinks
Accuracy	±(0.1%rdg. + 2dgt.)
Connection	10 pins
Size	68.5(W) x 33(H) x 16(D)mm
Panel cutout	64(W) x 28(H)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5580	\$29.95	\$26.90	\$23.70

ADD ON BOARD FOR QP-5570/80

This add on board makes it easy to set the range and decimal point on our QP-5570 or 80 panel meters. The ranges can be permanently set with a solder bridge or wired to a switch for selectable ranges.



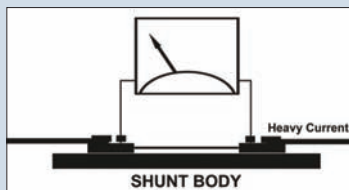
- No 200mV range on QP-5580
- Cannot be used in applications where voltage to be measured also powers DPM.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5575	\$9.95	\$8.75	\$7.75

TECH TALK!

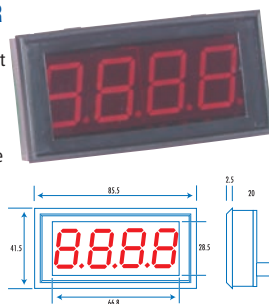
HOW TO INSTALL A SHUNT

Voltmeter on millivolt scale expressing mV as Amps.



3.5 DIGIT JUMBO LED PANEL METER

This is not just a digital display, but a fully functional high impedance digital panel meter that only requires power to operate. It will measure voltages from 200mV to 500VDC (jumper selectable) and has a maximum count of 1999. The module is suitable for a host of applications and can be used as a voltmeter or adapted for use as a current meter, thermometer etc. The decimal point location can be selected with a jumper and the module uses an easy "plug-in" fixing method. The meter shares a common ground with the voltage being measured.



Specifications	QP-5585
Type of display	LED
Digits	3.5 Digits (1999) 20.3mm figure height
Power	5VDC, common ground, 60mA typical
Over range	"1" shown on display
Accuracy	±0.5%
Size	85(W) x 42(H) x 25(D)mm
Panel cutout size	84(W) x 41(H)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5585	\$34.95	\$31.45	\$27.90

SELF-POWERED LED PANEL METERS

Simple and easy to install self-powered meters with voltage or current display. The voltmeter has a simple 2-wire connection, and the current meter has 4-wire connection with an included current shunt. Auto zero calibration and easy to read red LED display. Give your next project a truly professional look. Perfect for automotive, caravan or 4WD use.

- Cutout size 42 x 23mm
- Easy installation
- Reverse Polarity protection
- Auto zero calibration
- Self powered



LED VOLTMETER 0 - 30V DC CAT QP-5586

Specifications	QP-5586
Power requirements	8 - 30VDC
Measurement range	0 - 50VDC
Maximum display count	999
Sample frequency	400mS



Specifications	QP-5588
Power requirements	8 - 30VDC
Measurement range	0 - 50ADC
Maximum display count	1999
Sample frequency	400mS

LED AMMETER 0 - 50A DC CAT QP-5588

Current shunt included
Note! When connecting the ammeter QP-5588 it is essential that the wiring instructions provided with the product are followed, or the meter may be destroyed.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	QP-5586	\$24.95	\$22.35	\$19.70
	QP-5588	\$39.95	\$35.90	\$31.90

HEAVY DUTY CURRENT SHUNTS

Placed in series with a high power circuit, these shunt bars allow you to measure high current draw without needing a high current ammeter. Heavy duty brass construction and hand calibrated, they include large terminals for connection of the main circuit cables and smaller terminals for connection to a meter. Suitable for use with a standard multimeter or panel meter you simply measure the millivolts across the shunt to display the current draw of the circuit. Models are compatible with many readily available power meters such as our MS-6172 Digital DC Power Meter.

Cat	Max Current	Voltage at Max Current	Shunt Resistance	Accuracy
QP-5410	5A	50mV	10mOhm	0.5%
QP-5412	50A	50mV	1mOhm	0.5%
QP-5415	100A	50mV	0.5mOhm	0.5%
QP-5417	200A	50mV	0.25mOhm	0.5%



Diagram on web



NOTE: Care must be taken when using current shunts to measure DC circuits with common powered meters. Incorrect connection can cause a short circuit between the measuring terminal and the display power resulting in damage to the voltmeter. To avoid this issue the current shunt should be connected in series between the load and the power supply negative. Please see our website for more information.

MANUFACTURERS: WE HAVE A SHUNT SUPPLIER WHO IS IMPOSSIBLE TO BEAT FOR PRICES AND QUALITY. WE CAN SUPPLY CUSTOM SHUNTS IN QUANTITIES AS LITTLE AS 100 PIECES. CONTACT OUR WHOLESALE SUPPLIER FOR DETAILS

↑	Max Current	Voltage at max current	Cat.	Qty 1+	Qty 5+	Qty 10+
	5A	50mV	QP-5410	\$12.95	\$11.35	\$10.35
	50A	50mV	QP-5412	\$12.95	\$11.35	\$10.35
	100A	50mV	QP-5415	\$19.95	\$17.70	\$15.70
	200A	50mV	QP-5417	\$19.95	\$17.70	\$15.70

SOLDERING STATIONS

SOLDERING STATIONS - 240V



40W TEMPERATURE CONTROLLED SOLDERING STATION

An ideal entry-level soldering station for the hobby user. This station comes with a lightweight iron with anti-slip grip and tip cleaning sponge, with temperature adjustment up to 450°C. It also has a 4mm banana socket connected to mains earth for soldering static-sensitive components.

- Spare tip 0.5mm conical: TS-1622



Specifications	TS-1620
Recommended use	Hobby
Power	40W
Temperature range	150 - 450°C
Analogue/digital	Analogue
Operating voltage	240VAC
ESD rated	No
Lead-free rated	No
Dimensions	135(L) x 82(W) x 70(H)mm

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Soldering Station	TS-1620	\$59.95	\$53.95	\$47.90
0.5mm Conical Tip	TS-1622	\$8.95	\$8.25	\$6.95



48W TEMPERATURE CONTROLLED SOLDERING STATION

Ideal station for the advanced hobby user. It features accurate analogue temperature adjustment, ceramic element and a lightweight pencil that will give you hours of fatigue-free soldering. The stand has spare tip storage and is very sturdy.

- Spare tips/pencil available



Specifications	TS-1564
Recommended use	Hobby
Power	48W
Temperature range	150 - 450°C
Analogue/digital	Analogue
Operating voltage	24V
ESD rated	No
Lead-free rated	Yes
Dimensions	150(L) x 115(W) x 92(H)mm

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Solder Station	TS-1564	\$99.95	\$89.95	\$79.95
Spare Pencil	TS-1565	\$39.95	\$35.90	\$31.90
0.5mm Conical Tip	TS-1566	\$9.95	\$9.25	\$7.75
2.0mm Conical Tip	TS-1567	\$9.95	\$9.25	\$7.75



60W LEAD FREE SOLDERING STATION WITH LCD PANEL

Differing types of lead-free solder have a variety of melting points which can create problems for older soldering stations or those not designed for lead free solder. This excellent soldering station is particularly suited to lead-free soldering and is just as capable with ordinary leaded solder. The iron has a wide temperature range which is microprocessor controlled and maintained to within a few degrees of the selected setting. The lightweight soldering pencil is fitted with a soft insulated rubber grip for comfortable long term use and has a silicon rubber sheathed power cable that won't be damaged by contact with the hot soldering tip. It is connected to the main unit via a 1.1m low voltage cable which is terminated with a secure 5 pin connector. The control unit houses the temperature controls and simultaneously displays the set operating temperature and actual tip temperature, as well as system status on its digital LCD panel. For a list of spare parts search for TS-1390 on our website.

- Spare conical tips available



Specifications	TS-1390
Recommended use	Trade / Industrial
Power	60W
Temperature range	160 - 480°C
Analogue/digital	Digital
Operating voltage	24VAC
ESD rated	No
Lead-free rated	Yes
Dimensions	130(L) x 170(W) x 240(H)mm

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Solder Station	TS-1390	\$149.00	\$133.95	\$118.95
0.4mm Conical Tip	TS-1391	\$12.95	\$11.35	\$10.35
1mm Conical Tip	TS-1392	\$12.95	\$11.35	\$10.35
2mm Chisel Tip	TS-1393	\$12.95	\$11.35	\$10.35
3mm Bevel Tip	TS-1394	\$12.95	\$11.35	\$10.35

LET'S FIND EVERYTHING YOU NEED!

FROM \$17.95

TH-1781



ANTISTATIC PRODUCTS P142

FROM \$7.95

TD-2122



HEATSINK HOLDER P69

FROM \$12.95

HM-8100



BENCHTOP WORK MAT P141

FROM \$109.00

QM-3548



MAGNIFIERS P145

SOLDERING STATIONS - 240V (CONTINUED)

80W ESD SAFE DESOLDERING STATION WITH LCD

A high-performance desoldering station ideal for production and service use. This unit is microprocessor controlled for precise control of dynamic thermal performance where you need it. Suitable for desoldering all types of components, and also allow easy removal of the residual solder at the same time. Made of high quality ceramics, the heater inside the desoldering gun is highly stable and durable to provide quick heating.

The unit has a backlit LCD that displays the set temperature and the actual tip or nozzle temperature in Celsius and Fahrenheit. The temperature is easily adjusted in 1° increments with simple up/down buttons. ESD safe and suitable for lead-free solder.

Desoldering station comes with desoldering gun (with 2 conical tips), 4 filters, tip cleaning rod, and user instructions. A range of desoldering accessories is available separately.

- Backlit LCD
- Digital temperature display
- Microprocessor controlled
- Ceramic heater element
- Screw-n barrel
- Diaphragm air pump

Specifications	TS-1513
Desolder Gun	80W (heating power 130W)
Temperature range	160 - 480°C
Station Power	140W
Vacuum Pressure	600mm Hg
Dimensions	225(L) x 130(W) x 168(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Desolder Station	TS-1513	\$199.00	\$178.95	\$158.95
Spare Desoldering Gun	TS-1514	\$54.95	\$49.45	\$43.90
Spare Ceramic Heater	TS-1515	\$16.95	\$14.95	\$13.35
Spare 1.0mm Tip	TS-1516	\$13.95	\$12.35	\$10.95
Spare 0.8mm Conical Tip	TS-1517	\$13.95	\$12.35	\$10.95
Spare 1.3mm Conical Tip	TS-1518	\$13.95	\$12.35	\$10.95
Spare Filter Set of 2	TS-1519	\$1.95	\$1.75	\$1.55
Spare Black Plastic Cap	TS-1520	\$2.95	\$2.60	\$2.30

60W ESD SAFE SOLDER/DESOLDER REWORK STATION

Complete solder/desolder station for production and service use. Both the soldering pencil & hot air blower temperature are microprocessor controlled for precise control of dynamic thermal performance where you need it - at the work tip.

The control unit has two LCDs that display the set temperature and the actual tip or nozzle temperature in Celsius and Fahrenheit.

The temperature is easily adjusted in 1° increments with simple up/down buttons and the soldering/rework functions can be operated independently of each other.

Specifications	TS-1574
Recommended use	Trade / Industrial
ESD rated	Yes
Lead-free rated	Yes
Analogue/digital	Digital
Soldering Iron	
Power	60W
Temperature range	160 - 480°C
Operating voltage	24VAC
Air Pump	
Heating element power	80W
Power	45W
Air flow	0.5 - 24 litres/min
Blower power	320W
Temperature range	160 - 480°C
Operating voltage	240VAC
Dimensions	225(L) x 215(W) x 155(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Solder Station	TS-1574	\$299.00	\$269.00	\$239.00
2.5mm Single Tip	TS-1575	\$13.95	\$12.35	\$10.95
4.4mm Single Tip	TS-1576	\$13.95	\$12.35	\$10.95
10 x 10mm Quad Tip	TS-1577	\$19.95	\$17.70	\$15.70
15 x 15mm Quad Tip	TS-1578	\$19.95	\$17.70	\$15.70

70W ESD SAFE ANTI-STATIC TEMPERATURE CONTROLLED SOLDERING STATION WITH DIGITAL DISPLAY

Precision, Japanese manufactured instrument with excellent temperature stability and anti-static characteristics.

SOLDERING PENCIL

Lightweight pencil features a grounded tip, ceramic heater, integrated temperature sensor and very supple silicone rubber grip. The temperature sensor provides precise tip-temperature information to the heater controller, which maintains the selected heat setting with a high degree of accuracy. The tip fits snugly over the heater element providing fast heat transfer and tip temperature recovery during heavy soldering. The 1.1m silicone sheathed cord attaches to the controller via a 5 pin DIN connector.

- 0.5mm tip supplied

CONTROL UNIT

The control panel includes a digital temperature display unit, rotary temperature control, calibration control and display changeover switch to display either the desired or actual tip temperature. The darkened see-through cover prevents accidental temperature change but allows for easy access when required.

- Control dimensions, weight: 146(L) x 115(W) x 98(H)mm, 1.5kg

Specifications	TS-1440
Recommended use	Trade / Industrial
ESD rated	Yes
Lead-free rated	Yes
Analogue/digital	Digital
Soldering iron	
Power	70W
Temperature range	200-480°C
Operating voltage	24VAC
Dimensions	146(L) x 115(W) x 98(H)mm



Japanese Made



	Cat.	Qty 1+	Qty 3+	Qty 6+
Solder Station	TS-1440	\$299.00	\$269.00	\$239.00
Replacement sponge	TS-1445	\$7.95	\$6.95	\$6.25
0.5mm Tip	TS-1441	\$19.95	\$17.70	\$15.70
0.2mm Tip	TS-1442	\$19.95	\$17.70	\$15.70

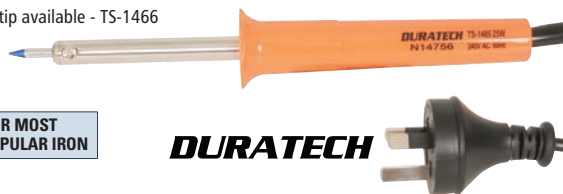
SOLDERING & ACCESSORIES

SOLDERING IRONS - 240V

25W SOLDERING IRON

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip, impact resistant handle.

- Spare tip available - TS-1466



OUR MOST POPULAR IRON

DURATECH

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1465	\$13.95	\$12.35	\$10.95
Spare tip	TS-1466	\$3.95	\$3.45	\$3.15

20/130W TURBO SOLDERING IRON

Sometimes you need that extra bit of heat in your soldering. Push the little red button on this iron and you get a lot more power - from 20 watts to 130 watts to be precise. Weller-style removable barrel, plated tip and ceramic element.

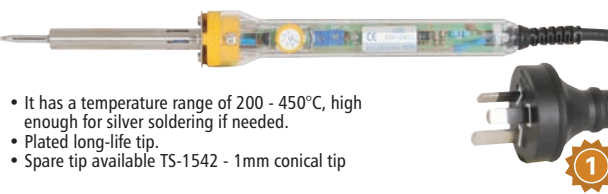
- Spare tips available:
TS-1555 - 0.5mm conical tip
TS-1556 - 1mm conical tip
TS-1557 - 2mm chisel



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1554	\$17.95	\$16.10	\$14.30
0.5mm conical tip	TS-1555	\$4.95	\$4.45	\$3.90
1mm conical tip	TS-1556	\$4.95	\$4.45	\$3.90
2mm chisel tip	TS-1557	\$4.95	\$4.45	\$3.90

30W TEMPERATURE CONTROLLED SOLDERING IRON

If your budget doesn't extend to a soldering station, you can still have temperature control. This iron is adjustable with a dial on the handle.



- It has a temperature range of 200 - 450°C, high enough for silver soldering if needed.
- Plated long-life tip.
- Spare tip available TS-1542 - 1mm conical tip

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1540	\$29.95	\$26.90	\$23.70
1mm Conical Tip	TS-1542	\$4.95	\$4.45	\$3.90

40W SOLDERING IRON

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip impact-resistant handle.



- Fully electrically safety approved.
- Spare tip to suit use Cat. TS-1476

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1475	\$18.95	\$16.95	\$14.95
Spare tip	TS-1476	\$4.95	\$4.45	\$3.90

LET'S FIND EVERYTHING YOU NEED!

DURATECH SOLDER

60% TIN / 40% LEAD

Two sizes available, 1.0mm and 0.71mm diameter

- 0.71mm is ideal for work with ICs and all fine soldering
- Both types are resin cored
- Hobbypacks are supplied in easy to use cannisters



1KG ROLLS

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3002	\$74.95	\$67.50	\$59.95
1.00mm	NS-3015	\$74.95	\$67.50	\$59.95

200G ROLLS

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3005	\$14.95	\$13.35	\$11.70
1.00mm	NS-3010	\$14.95	\$13.35	\$11.70

HOBBYPACK CANNISTERS

- Contains 15-20 grams weight.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3008	\$1.95	\$1.75	\$1.55
1.00mm	NS-3013	\$1.95	\$1.75	\$1.55

SOLDER STAND WITH SOLDER REEL DISPENSER

Every technician needs one of these on their workbench! It will hold our solder reels and the solder is fed through the guide. It has a handle, so it can easily be carried, and it can be wall mounted to be right there where you always need it. The base is super heavy so even when the solder reel is nearly empty it will feed ok.

- Also good for field service work
- Shaft diameter is 16mm
- Will hold our 1kg rolls
- Weight 620g
- Dimensions: 90(L) x 100(W) x 110(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1504	\$17.95	\$15.95	\$14.35

LEAD-FREE SOLDERS

99.3% tin, 0.7% copper lead-free. Sizes for every application from hobby to industry.



200G ROLLS

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3088	\$19.95	\$17.70	\$15.70
1.00mm	NS-3094	\$19.95	\$17.70	\$15.70

500G ROLLS

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3090	\$49.95	\$44.90	\$39.90
1.00mm	NS-3096	\$49.95	\$44.90	\$39.90

HOBBYPACK CANNISTERS

- Contains 15-20 grams weight.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
0.71mm	NS-3086	\$2.95	\$2.75	\$2.30
1.00mm	NS-3092	\$2.95	\$2.75	\$2.30

"SILVER" SOLDER

This product is a wire-type solder which is a low temperature version of silver solders of the past. Silver solder is used to make mechanically sound joints similar to brazing but without the need for an oxy-acetylene or oxy-butane torch. It is far, far stronger than tin/lead solder.

The product is basically pure tin with around 4% silver. It contains no lead or cadmium. It melts at 221°C so could be actually soldered with a very hot soldering iron but best results are with a butane type blowtorch. The product includes an adequate amount of liquid flux which is basically zinc chloride, water, ammonia and other chlorides. The flux is an eye irritant so safety goggles should be worn.

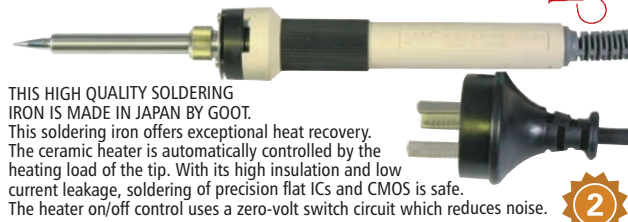
- 14g solder with 14g of flux
- Wire diameter: 1.16mm approx
- MSDS supplied
- Coil length: 1.8m approx



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
14g Solder + 14g Flux	NS-3045	\$19.95	\$17.70	\$15.70

SOLDERING IRONS - 240V (CONTINUED)

80W GOOT SOLDERING PENCIL - 240V



THIS HIGH QUALITY SOLDERING IRON IS MADE IN JAPAN BY GOOT. This soldering iron offers exceptional heat recovery. The ceramic heater is automatically controlled by the heating load of the tip. With its high insulation and low current leakage, soldering of precision flat ICs and CMOS is safe. The heater on/off control uses a zero-volt switch circuit which reduces noise.

- Tip temperature is set at 320°C
- The power lead is made from silicone rubber - very flexible
- The handle incorporates a ribbed rubber piece for extra grip
- Electricity Safety Approval Number SAITE20185

Japanese Made

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Pencil	TS-1430	\$79.95	\$71.95	\$63.95
0.5mm Conical Tip (As supplied with iron)	TS-1432	\$19.95	\$17.70	\$15.70
0.3mm Conical Tip	TS-1434	\$19.95	\$17.70	\$15.70
3.0mm Chisel Tip	TS-1436	\$19.95	\$17.70	\$15.70

80W SOLDERING IRON

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip, impact resistant handle.

- Fully electrically safety approved.
- Spare tip to suit use Cat. TS-1486



DURATECH

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron	TS-1485	\$22.95	\$20.35	\$18.35
Spare tip	TS-1486	\$8.95	\$7.95	\$6.95

SOLDERING STARTER KITS

25W SOLDERING IRON STARTER KIT WITH DMM

The ideal starter package for young electronics enthusiasts or the home handyman, this kit contains everything needed for basic electronics work. The kit includes a soldering iron, digital multimeter, and set of hand tools suitable for working on small items such as electronics projects or automotive circuits.

- Digital multimeter
- 25W soldering iron with spare tip
- De-soldering tool with spare tip
- Lead free solder
- Phillips head screwdriver
- Flat head screwdriver
- Side cutters
- Long nose pliers



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1652	\$39.95	\$35.90	\$31.90

MY FIRST SOLDERING IRON

At last you can have your own soldering iron with minimal adult supervision (min 12 years+). It includes a full power iron with long-life tip, a spare tip, stand for the iron (when it's hot), metal solder removal sucker and a generous portion of 1mm solder wire in a handy dispenser tube.

This set will become your best friend in the world of electronics!



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Starter Kit	TS-1651	\$24.95	\$22.35	\$19.70

LET'S FIND EVERYTHING YOU NEED!

SOLDER FLUX PEN - 12ML

A quick drying, no-clean flux for use when removing or replacing surface mount components. Applying the flux to solder joints will aid re-flow when heating the joint to remove the component, or it can be applied to bare copper or tinned tracks providing excellent solderability.

- Dries in 5 to 10mins.
- Handy 12ml pen with chisel tip.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12ml	NS-3036	\$11.95	\$10.70	\$9.50

SOLDER PASTE SMD SYRINGE - 15G

Ideal for surface mount work and rework, solder paste provides a quick and easy soldering solution. Supplied in a syringe for easy application, simply apply it to the soldering pads, put your components in place and heat it with your soldering iron. Solder paste can go off in storage: we've found a local supplier so you can always be confident that the paste you get will be fresh. 63% tin 37% lead.

Solder paste is best kept cool for long life and should be kept refrigerated. For this reason, please ask sales staff for this product, as it will be kept in refrigerated storage, not on display.

- Size: 15 grams
- Dimensions: 120 (L) x 15mm (Dia)



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
15g	NS-3046	\$12.95	\$11.35	\$10.35

LEAD FREE SOLDER PASTE SMD SYRINGE - 10G

Lead free solder paste syringes provide a quick and easy soldering solution for your surface mount work and rework. The superior wetting ability of this paste results in bright, smooth and shiny solder joints with lead free alloys. Supplied in a syringe for easy application, simply apply to the soldering pads, put your components in place and heat it with your soldering iron or hot air rework tool.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
10 grams	NS-3048	\$12.95	\$11.35	\$10.35

SOLDER FLUX PASTE - 56G TUB

A mildly-activated agent to provide superior fluxing ability, which enables you to produce high quality soldered joints, and reducing solder waste. The active ingredients in DeoxIT® Rosin Soldering Flux are non-ionic and non-conductive, and ideal for situations when post-soldering cleaning is not possible, and the residue must be highly insulating.

- Non-flammable
- Non-corrosive
- Weight: 56g



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
56g	NS-3070	\$12.95	\$11.35	\$10.35

SOLDER FUME EXTRACTOR

Designed to remove dangerous solder fumes from the work area. Suitable for use in production lines, service centres, R&D workbenches or the hobbyist. It incorporates a ball bearing high volume fan to maximise airflow which is directed upwards at the rear of the unit to aid in safe dispersion of fumes. ESD safe.

- Spare filter - sold separately Cat. TS-1581
- Dimensions: 260(H) x 200(W) x 170(D)mm

Don't pay silly prices elsewhere. This one works fine.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Fume Extractor	TS-1580	\$69.95	\$62.95	\$55.95
Spare Filter	TS-1581	\$9.95	\$8.75	\$7.75

GAS SOLDERING IRONS

GAS SOLDERING IRONS

LOW COST GAS SOLDERING IRON



A low cost alternative, this butane gas soldering iron features adjustable tip temperature and a fold-out stand. Remove the soldering tip and you have a flame torch for heatshrink etc. Great for soldering, cutting plastic, or heat shrinking plastic.

- Dimensions: 210(L) x 20(dia)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron - Gas	TS-1111	\$26.95	\$23.95	\$21.35
Spare Catalyst	TS-1104	\$14.95	\$13.35	\$11.70
1mm Conical Tip	TS-1105	\$4.95	\$4.45	\$3.90

GAS SOLDERING IRON / TORCH KIT

Everything you need to solder, silver solder, braze, heatshrink, strip paint etc. The iron is refillable with standard butane gas and has an on/off switch and a built-in stand for safety. Extra soldering, torch and cutting tips are included, all housed in a moulded storage case. Replacement gas: NA-1020

- 3 soldering tips
- 1 torch attachment
- 1 rope cutter
- 178mm long



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron/Torch Gas	TS-1112	\$39.95	\$35.90	\$31.90

PRO GAS SOLDERING TOOL KIT

A sturdy, portable, self-igniting butane powered gas soldering iron tool kit with 3 tips. Produces a 1300°C adjustable flame for low end brazing, tin/plastic melting, automotive repair work, welding and of course heat shrinking. Supplied with 3 interchangeable metal tips for PCB work. For extra convenience the torch has a handy retractable stand so you can rest it somewhere without worrying about it rolling around. It is supplied in a plastic carry case that includes a cleaning sponge, extra tips, a deflector and a cap for the soldering iron.

Spare tips available separately:
TS-1116 - 3mm Flat
TS-1117 - 4mm Chisel
TS-1118 - Blower Tip

Specifications	TS-1113
Operating time	80-100 min (on minimal flame)
Gas capacity	20ml
Ignition	Internal Piezo Crystal igniter
Weight	115g without gas
Temperature of torch	Up to 1300°C
Temperature of hot blow	Up to 650°C
Temperature of soldering	Up to 500°C
Case dimensions	236(L) x 32(W) x 37(D)mm



BUTANE GAS REQUIRED - USE NA-1020 ON PAGE 29, 174

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Pro Gas Soldering Tool Kit	TS-1113	\$69.95	\$62.95	\$55.95
3mm Flat Tip	TS-1116	\$4.95	\$4.45	\$3.90
4mm Chisel	TS-1117	\$4.95	\$4.45	\$3.90
Blower Tip	TS-1118	\$12.95	\$11.35	\$10.35

BATTERY POWERED IRONS

30W 12VDC SOLDERING IRON WITH CIGARETTE LIGHTER PLUG



NEW 2015

This 12V 30W soldering iron features a fused cigarette lighter plug lead to allow you to power it from the car cigarette lighter socket. Ideal for automotive soldering. Metal sheet solder stand included.

- Dimensions: 205(L) x 35(Dia.)mm
- Lead length: 1.5 metre

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
30W 12VDC	TS-1536	\$19.95	\$17.95	\$15.70

16W 7.2VDC BATTERY OPERATED SOLDERING IRON



NEW 2015

Find a new use for your spare 7.2V rechargeable battery pack out of your R/C car. This convenient soldering iron is designed to be powered off any 7.2V rechargeable battery, commonly used in Electric Remote Controlled Cars. The iron is terminated with a 2 pin nylon plug commonly used with Electric R/C Car batteries, and has an inline power switch for that added convenience.

- Suits any Ni-Cd, Ni-MH, Li-ion, Li-Po 7.2V rechargeable battery with compatible connector
- Connector to suit, use PP-2020
- Lead length: 1.5 metre
- Dimensions: 205(L) x 35(Dia.)mm

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
16W Battery	TS-1538	\$14.95	\$13.45	\$11.95

6W SOLDERING IRON - BATTERY POWERED



We have been surprised by the popular acceptance of this product, considering its modest power rating. Don't expect too much, but it will re-solder a dry joint or fix a solder lug, etc. It is ideal in potentially explosive situations, such as a bilge, or where petrol fumes may be present. Reaches full temp in about 10 seconds.

- Uses 3 x AA batteries (not included)
- Safety cover that locks the switch to "Off" so it won't discharge inside your tool box.
- Dimensions: 175(L) x 36(W) x 18(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
6W Battery	TS-1535	\$19.95	\$17.70	\$15.70

LET'S FIND EVERYTHING YOU NEED!

BUTANE GAS

Use it for filling up your gas soldering iron, flame torches, cigarette lighters, etc. Includes five different adaptors, which cover most different gas valves. Includes filling instructions.

- Enough gas for many many refills
- Cannot be sent by post



5 adaptors supplied

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
150g	NA-1020	\$5.95	\$5.25	\$4.75

TIPS FOR SUPERSEDED IRONS & STATIONS

TIPS TO SUIT TS-1425 100W SOLDERING GUN

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Pkt 2	TS-1426	\$7.95	\$6.95	\$6.25

TIPS TO SUIT WELDER SOLDERING IRON (VARIOUS MODELS)

↑	Welder Part	mm	°C	Cat.	Qty 1+	Qty 3+	Qty 6+
	PTA6	1.6	315	TS-1352	\$19.95	\$17.70	\$15.70

TIPS TO SUIT TS-1300 PORTASOL 50 GAS SOLDERING IRON

↑	Type	mm	°C	Cat.	Qty 1+	Qty 3+	Qty 6+
	Chisel	4.8	350	TS-1303	\$9.95	\$8.75	\$7.75

GAS SOLDERING IRONS - PORTASOL

A leading brand recognised worldwide. Portasol® products are designed and manufactured in Ireland, to the highest quality standards. Since commencing operation in 1983, they have forged their way into the market with some of the most rugged and reliable gas powered soldering and heating tools in the world. They utilise catalytic combustion (flame tips excluded), which converts the gas flame into infrared radiation. It is a safe, flameless way of heating the tips evenly and continuously. They all use standard butane gas, and have a variety of tips available to support a wide range of applications.

portasol®

PORTASOL® TECHNIC GAS SOLDERING IRON

The Portasol® Technic combines compact power, and convenient reliability, making it one of the most versatile gas soldering irons available. It offers a run time of around 60 minutes, and tip temperature is adjustable up to 450°C. With equivalent electrical power of between 10 and 60 Watts, it is ready to tackle just about anything. The protective end cap features a built in flint type igniter, and if the gas is left on, it will turn it off when replaced. If a compact, versatile and reliable gas iron is what you're after, then the Portasol® Technic is for you.

Specifications	TS-1305
Operating time	60 min (approx).
Refill time	10 sec (approx).
Ignition	Flint ignitor in end cap.
Dimensions	170(L) x 19(Dia)mm.
Weight	60g without gas.

TIPS TO SUIT

1.0mm Conical	TS-1306	\$23.95
2.4mm Chisel	TS-1307	\$23.95
4.8mm Chisel	TS-1308	\$23.95



	Cat.	Qty 1+	Qty 3+	Qty 6+
↑	TS-1305	\$59.95	\$53.95	\$47.90

PORTASOL® PRO PIEZO GAS SOLDERING IRON

The Portasol® Pro Piezo is a powerful gas soldering iron featuring an adjustable temperature control allowing soldering tip temperatures up to 580°C. With equivalent electrical power of between 15 and 75 Watts, there is little that's not possible with this beauty. It incorporates a viewing window at the end of the gas tank, to keep an eye on the fuel level. The fuel tank fills in around 20 seconds, and will provide approximately 45 minutes of run time. Ignition is via the built in Piezo crystal mechanism, and the end cap provides safety gas shut off when replaced. The Portasol® Pro Piezo is a dream to use, and will not let you down.

- 2.4mm double flat tip supplied.

Specifications	TS-1310
Operating time	45 min (approx).
Refill time	20 sec (approx).
Ignition	Internal Piezo crystal ignitor.
Dimensions	178(L) x 22(Dia)mm.
Weight	75g without gas.

TIPS TO SUIT

1.0mm Chisel	TS-1311	\$23.95
2.4mm Chisel	TS-1312	\$23.95
4.8mm Chisel	TS-1313	\$23.95
Hot Air Blow	TS-1314	\$23.95
Hot Knife	TS-1315	\$23.95
Flame	TS-1316	\$23.95



	Cat.	Qty 1+	Qty 3+	Qty 6+
↑	TS-1310	\$99.95	\$89.95	\$79.95

PORTASOL® PRO PIEZO GAS SOLDERING TOOL KIT

This kit contains a Portasol® Pro Piezo Gas Soldering Iron and the following.

- Quality storage case
- Cleaning sponge and tray
- 2.4mm double flat tip (TS-1312)
- Hot air blow (TS-1314)
- Hot knife tip (TS-1315)
- Hot air deflector
- Flame tip (TS-1316)



	Cat.	Qty 1+	Qty 3+	Qty 6+
↑	TS-1318	\$129.00	\$115.95	\$102.95

PORTASOL® SUPER PRO GAS SOLDERING IRON

The Portasol® Super Pro is the big brother of all irons in the range. It features adjustable tip temperature up to 580°C, with equivalent electrical power of between 25 and 125W! 125W may seem somewhat excessive to some. You don't need a V8 to drive around town, but it's nice to know that the power is there when it's needed isn't it? Ignition is achieved with the internal Piezo crystal mechanism, and run time is around 2 hours on a 30 second refill. The stainless steel finished gas tank features a viewing window to keep an eye on fuel level, & the protective end cap also acts as a safety cut off for the gas valve control when replaced. With the various tips available & huge power at hand, no job is a match for the Portasol® Super Pro.

- 2.4mm tip supplied.

Specifications	TS-1320
Operating time	120 min (approx).
Refill time	30 sec (approx).
Ignition	Internal Piezo crystal ignitor.
Dimensions	234(L) x 25(Dia)mm.
Weight	135g without gas.

TIPS TO SUIT

1.0mm Chisel	TS-1321	\$24.95
2.4mm Chisel	TS-1322	\$24.95
4.8mm Chisel	TS-1323	\$24.95
Hot Air Blow	TS-1324	\$24.95
Hot Knife	TS-1325	\$24.95



	Cat.	Qty 1+	Qty 3+	Qty 6+
↑	TS-1320	\$115.00	\$103.95	\$91.95

PORTASOL® SUPER PRO GAS SOLDERING TOOL KIT

Features 120 minute run time, 30 second fill, maximum 580°C temperature and 40 second heat up. This kit contains a Portasol® Super Pro Gas Soldering Iron and the following.

- Quality storage case
- 2.4mm double flat tip (TS-1322)
- Hot air blow (TS-1324)
- Hot air deflector
- Cleaning sponge and tray.
- 4.8mm double flat tip (TS-1323)
- Hot knife tip (TS-1325)



	Cat.	Qty 1+	Qty 3+	Qty 6+
↑	TS-1328	\$159.00	\$142.95	\$126.95

GAS TORCHES & COMBOS

PENCIL BUTANE TORCH

Pocket sized gas torch for heatshrinking, soldering etc and uses standard butane gas. Adjustable flame, all metal construction.

- Dimensions: 205(L) x 13(Dia)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1667	\$11.95	\$10.70	\$9.50

COMPACT POCKET SIZE GAS BLOWTORCH

At only 95mm high, this product is amazing. It is a fully self-contained Butane 1300° C portable blow torch. It has simple press button Piezo ignition, flame control and safety lock. The unit can be recharged with a suitable Butane refill (such as the NA-1020) It will take 7g of gas which will give 30 minutes of use at mid setting. Has protective burner cap.

Ideal for:

- Low temp silver soldering
- Heat Shrinking
- Soft soldering ("sweating")
- Hobby use
- Food preparation etc.

Dimensions:
95(H) x 55(L) x 26(W)mm,
weight 45g (dry)

For suitable Butane Gas use NA-1020
For Silver Solder use NS-3045



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1610	\$19.95	\$17.70	\$15.70

PIEZO IGNITION BUTANE GAS TORCH

Perfect for silver soldering, brazing, heat treating, heat-shrinking, paint removal etc. It's able to produce a flame about 100mm long, so is capable of more than light-duty work. The 64ml tank gives a burn time of 60-70 minutes and uses any butane gas. It also has an adjustable flame, a child-proof piezo ignition button and a stand so you don't knock it over and burn the house down.

- Piezo ignition with safety lock
- 1300° C adjustable flame
- Butane gas refill: NA-1020
- Dimensions: 150 (H), base 69 x 69mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1660	\$39.95	\$35.90	\$31.90

3 IN 1 HEAT BLOWER & SOLDERING IRON

A handy 3-in-1 unit with flame or flameless heat blower and soldering iron function. Great for general heating, drying, melting, soldering, heat shrinking etc. It also features adjustment for temperature control, Piezo ignition, child resistant latch and uses butane gas. The tip has a sturdy cap for when not in use. Ideal for hobbyists and professionals alike.

Specifications	TH-1604
Burning time	55-95min
Gas capacity	10ml
Temperature of hot blow	Up to 500°C
Temperature of soldering	Up to 450°C
Measures	144(L) x 35(W) x 23(D)mm

Spare Tip available: TH-1603
Butane gas required - use NA-1020



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Gas Soldering Iron	TH-1604	\$29.95	\$26.90	\$23.70
1mm Conical Tip	TH-1603	\$3.95	\$3.45	\$3.15

3 IN 1 MINI GAS SOLDERING TOOL SET

A handy gas soldering iron with flame or flameless heat blower function. Great for general heating, drying, melting, cutting, soldering, heat shrinking etc. It also features adjustment for temperature control, Piezo ignition, retractable stand, visible gas tank and child resistant latch. The tip has a sturdy cap for when not in use. Carry case includes 1mm tip, 3mm chisel tip, 5mm angle tip, hot knife tip, 1mm solder hobby pack, cleaning sponge and tray.

Specifications	TH-1606
Burning time	55-95min
Gas capacity	7ml
Power range	25W to 70W
Flame temp	Up to 1300 C
Iron dimensions	148(L) x 35(W) x 23(D)mm
Case dimensions	175(W) x 125(D) x 33(H)mm

Spare 1mm Conical Tip available: TH-1603
Butane gas required - use NA-1020



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
3 in 1 Mini Gas Soldering Tool Kit	TH-1606	\$44.95	\$40.45	\$35.90
1mm Conical Spare Tip	TH-1603	\$3.95	\$3.45	\$3.15

SEE OUR HEATSHRINK PACK WITH GAS BLOWER ON PAGE 214

PRO GAS SOLDERING STARTER KITS

PRO GAS SOLDERING KIT WITH WIRE STRIPPERS/CUTTERS & HEATSHRINK

Excellent value and a handy kit to have close at hand for those quick repairs. Includes many of the necessary bits and pieces for your wiring needs, making it an ideal kit for the home handyman, enthusiast or electrician.

- Supplied in a hard plastic carry case.

This kit contains:

- Pro Gas Soldering Iron with Spare Tips
- 115mm Stainless Steel Side Cutters (TH-1890)
- 3mm Desolder Braid (NS-3020)
- 140mm (5.5") High Quality Electrical Shears (TH-1758)
- Heavy Duty Wire Stripper/Cutter/Crimper with Wire Guide (TH-1827)
- 2.7mm Solder Splice Heatshrink - 5 pieces
- 4.5mm Solder Splice Heatshrink - 5 pieces
- 6mm Solder Splice Heatshrink - 5 pieces
- Heatshrink Pack:
 - 1.5mm: 40 x black, 10 x red, 10 x clear
 - 2.5mm: 25 x black, 5 x red, 5 x clear
 - 3mm: 17 x black, 4 x red, 4 x clear
 - 5mm: 14 x black, 3 x red, 3 x clear
 - 6mm: 6 x black, 2 x red, 2 x clear



NEW LOW PRICE

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1114	\$79.95	\$71.95	\$63.95

GAS SOLDERING & HEATSHRINK KIT

Excellent value and a handy kit to have close at hand for those quick and urgent repairs. Includes many of the necessary accessories for your wiring and soldering needs, making it an ideal kit for the home handyman, enthusiast or electrician. Supplied in a hard plastic carry case.

NEW 2015

This kit contains:

- Pro Gas Soldering Iron with built-in stand, and cap. Spare tips included: Chisel tip, anvil tip, flat tip, deflector, solder, cleaning sponge
- 3mm Desolder Braid (NS-3020)
- 115mm Stainless Steel Side Cutters (TH-1890)
- Heavy Duty Wire Stripper/Cutter/Crimper with Wire Guide (TH-1827)
- 28 Piece Screwdriver set
- Heatshrink assortment:
 - 1.5mm - 20 x black, 5 x red, 5 x clear
 - 2.5mm - 10 x black, 3 x red, 3 x clear
 - 3.0mm - 8 x black, 2 x red, 2 x clear
 - 5.0mm - 7 x black, 2 x red, 2 x clear
 - 6.0mm - 3 x black, 1 x red, 1 x clear
- Straight Demagnetised 116mm Long Tweezers
- Curved Demagnetised 121mm Long Tweezers
- Small 9 x LED Torch 26(Dia.) x 84mm (Requires 3 x AAA batteries)
- Case dimensions: 130(W) x 150(D) x 70(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1115	\$109.00	\$89.95	\$79.95

PCB HOLDERS

PCB HOLDER WITH LED MAGNIFIER

Ideal aid for PCB assembly, soldering work, model making and any application where a third hand is needed. This helping hand has a magnifying glass with LED light that provides continuous light for up to 10 hours. The two strong alligator clips can be adjusted in numerous ways to hold the board as you solder. Heavy cast iron base ensures added stability. Comes complete with a soldering iron holder.

- LED: 2 x White LED
- Lens size: 90(Dia.)mm
- Lens magnification: 2X
- Power: Requires 3 x AAA batteries
- Dimensions:
Overall height: 190mm
Base dimensions: 114(L) x 75(W) x 29(H)mm



NEW
2015



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1987	\$16.95	\$14.95	\$13.35

PCB HOLDER

Every technician needs one of these on their workbench! It will hold a PCB up to 200 x 140mm in size. The PCB is held in place by spring clamps and can be rotated through 360° at increments of 15°. The moveable arm comes with cushion grip which holds your components in place. The base is heavy with well-balanced centre of gravity and built-in rubber feet to ensure you have a firm working surface.



A versatile holder suitable for working with different shaped components, connectors, soldering strips, etc. Also good for field service work.

- Maximum holding size: 200(L) x 140(W)mm
- Dimensions: 300(L) x 165(W) x 125(H)mm
- Weight: 450g

Note: PCB not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1980	\$19.95	\$17.95	\$15.70

STANDS & CLEANERS

SOLDERING IRON STANDS

ECONOMY

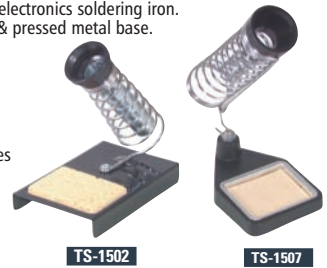
General-purpose stand for just about any electronics soldering iron. It has a large, thirsty tip-cleaning sponge & pressed metal base.

- Base: 84(W) x 130(D) x 25(H)mm
- Holder: 105(L) x 40(W)mm
- Complete height: 120mm

DELUXE

Ideal for heavier soldering irons. It features a hefty cast iron base with removable sponge tray and twin spiral iron holder.

- Base: 78W x 115(D) x 30(H)mm
- Holder: 135(L) x 45(W)mm
- Complete height: 145mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Economy Stand	TS-1502	\$9.95	\$8.75	\$7.75
Spare sponge to suit TS-1502	TS-1503	\$2.75	\$2.45	\$2.15
Deluxe Stand	TS-1507	\$16.95	\$14.95	\$13.35
Spare sponge to suit TS-1508	TS-1508	\$3.95	\$3.45	\$3.15

SOLDERING IRON TIP CLEANING PASTE

A healthy tip makes for easier soldering and better heat transfer. This tip contains powdered solder and non-corrosive flux, so all you need to do is dip your hot soldering tip in, and it will clean and tin in one simple action.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
15g Tin	TS-1512	\$12.95	\$11.35	\$10.35

GOOT SOLDERING IRON TIP CLEANER

The "curly brass" insert doesn't need to be kept wet and cleans without damaging the tip. Uniform iron temperature ensures consistent joint quality and reduces cycle times. It's made from a heavy-duty heat-resistant rubber base that won't slip around on the bench, is static-safe and is also suitable for lead-free solders.



- Supplied with spare insert
- Dimensions-Insert: 45(Dia) x 30(H)mm / Overall: 58(Dia) x 58(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TS-1510	\$17.95	\$15.95	\$14.35

LET'S FIND EVERYTHING YOU NEED!

3MM DESOLDER BRAID

A specially treated piece of braid for removing solder from a PCB. Place the braid over the solder and apply soldering iron to efficiently remove solder. 3mm wide, 120mm long.



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
3mm wide	120mm	NS-3020	\$3.25	\$2.90	\$2.60

GOOT DESOLDER BRAID

High quality Goot brand Gootwick, made in Japan. Contains wash-free RMA flux, conforms to MIL-F-14256F

- Plastic reels
- 1.5m long



NOTE!
Japanese Made

↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
1.5mm wide	1500mm	NS-3026	\$5.95	\$5.25	\$4.75
2.0mm wide	1500mm	NS-3027	\$5.95	\$5.25	\$4.75
3.0mm wide	1500mm	NS-3028	\$5.95	\$5.25	\$4.75

SOLDER SUCKER & BLOWER BULB

A quick & simple bulb type solder sucker that is cheap, compact and effective. Buy two or three and you will always have one handy

- Approximately 50(D) x 110(L)mm
- Versatile! Suck or blow



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Solder Sucker	TH-1850	\$6.95	\$6.25	\$5.50

PLASTIC DESOLDER TOOL



ABS plastic body with strong suction. Very easily cleaned. Total length including tip 195mm.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Tool	TH-1860	\$11.95	\$10.70	\$9.50
Spare tip	TH-1861	\$3.95	\$3.45	\$3.15

METAL DESOLDER TOOL



Made of lightweight metal and has strong suction.

- Constant vacuum force
- Cleans itself with each action
- Replacement tip (Teflon)
- Total length incl tip - 195mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Tool	TH-1862	\$16.95	\$14.95	\$13.35
Spare tip	TH-1863	\$4.95	\$4.45	\$3.90

DELUXE GOOT DESOLDERING TOOL



High quality GOOT brand desoldering tool. Japanese built quality and a large vacuum chamber for strong suction.

- Large vacuum chamber - Total length: 330mm



NOTE!
Japanese Made

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Tool	TH-1856	\$27.95	\$24.95	\$22.35
Spare tip	TH-1857	\$8.95	\$7.95	\$6.95

COMPONENT STORAGE

STORAGE CASES

Ideal for carrying small components and is an indispensable addition to any tool kit. See through plastic construction enables the contents to be easily identified and the 2 snap action latches secure the lid and keep everything in its rightful place.

6 COMPARTMENT MINI STORAGE CASE

2 of the compartments have guides to enable them to be divided in half and 2 dividers are included.

- Compartments: 27(W) x 77(L) x 23(D) mm
- Overall size: 125(W) x 85(L) x 27(D) mm.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6308	\$2.75	\$2.45	\$2.15



18 COMPARTMENT STORAGE BOX

This storage box consists of three rows with removable dividers so you can configure it for longer parts.

- Compartment size: 37(L) x 37(W) x 30(D)mm
- Dimensions: 230(L) x 115(W) x 35(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6306	\$4.45	\$3.95	\$3.45



18 COMPARTMENT STORAGE CASE

The basic box has 6 compartments measuring 43(W) x 37(D) x 167(L)mm. These can be divided into 2, 3 or 4 sub-compartments using the dividers provided.

- Overall size: 274(W) x 40(D) x 175(L)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6312	\$8.95	\$7.95	\$6.95



28 COMPARTMENT STORAGE CASE

Can be configured to have anything from 4 big compartments measuring 350(W) x 52(L) x 45(D) mm to 28 compartments measuring 48(W) x 52(L) x 45(D) mm, or anything in between using the dividers provided.

- Overall size: 357(W) x 48(H) x 220(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6313	\$13.95	\$12.35	\$10.95



INDUSTRIAL STORAGE CASES

Built for the rough and tumble of the building site, factory or workshop. Made from sturdy ABS with solid clasps and removable compartment trays so you can take parts with you to the job. Two sizes available:

15 COMPARTMENT STORAGE

12 compartments: 55(L) x 40(W) x 50(D)mm
3 compartments: 80(L) x 50(W) x 50(D)mm
Case size: 335(L) x 205(W) x 60(D)mm

19 COMPARTMENT STORAGE

4 compartments: 55(L) x 40(W) x 50(D)mm
8 compartments: 80(L) x 50(W) x 50(D)mm
7 compartments: 110(L) x 80(W) x 50(D)mm
Case size: 335(L) x 420(W) x 60(D)mm



⬆	Cat.	Qty 1+	Qty 4+	Qty 10+	
	15 Compartment	HB-6304	\$9.95	\$8.75	\$7.75
	19 Compartment	HB-6305	\$16.95	\$14.95	\$13.35

LET'S FIND EVERYTHING YOU NEED!

CONDUCTIVE FOAM

Non-static reusable sheeting for storing CMOS, IC's, LSI's, etc.

- Will store up to 150 ICs on one sheet
- Size 225 x 150mm.
- Ideal for lining storage trays to provide antistatic protection
- Can be cut with scissors or hobby knife for smaller pieces

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	ZV-9998	\$9.95	\$8.75	\$6.75



PORTABLE 12 COMPARTMENT STORAGE CABINET

We say this is really useful because you can tote it around in your van without spilling the contents.

The system features a "double lock" closure on each storage box which should ensure retention of components stored. There are 12 storage compartments, 2 x large measuring 295(W) x 65(D) x 65(H)mm (all are 65(D) x 65(H)mm), 4 medium 145(W) and 6 small measuring 95(W)mm.

The attaché-case outer carrying case measures 300(W) x 310(H) x 145(D)mm. The whole thing is held together with snap locks and 4 hinges.

This is a commercial grade "Tradies" product.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6301	\$36.95	\$31.45	\$27.90

6 BIN PARTS RACK CABINETS

SMALL - Similar to our large parts rack, this unit is designed to house smaller items such as ICs, nuts, screws etc.

- Trays measure 60(W) x 65(H) x 45(D)mm each and also tilt down to 45 degrees.
- The rack can be wall mounted & multiple units can be used for larger storage requirements.
- Overall size: 400(W) x 75(H) x 60(D)mm



LARGE - This handy parts rack holds a variety of components in neat, see through trays that tilt down to an angle of 45 degrees for easy access.

- Each has an integral label holder and measures 85(W) x 95(H) x 65(D)mm.
- The rack can be wall mounted and multiple units can be nested together for larger storage requirements.
- Dimensions are 600(W) x 110(H) x 90(D)mm



Three units stacked together

⬆	Cat.	Qty 1+	Qty 4+	Qty 10+	
	Small Rack Cabinets	HB-6317	\$9.95	\$8.75	\$7.75
	Large Rack Cabinets	HB-6318	\$24.95	\$22.35	\$19.70

30 DRAWER PARTS CABINET

6 rows of 5 drawers, measuring 50(W) x 115(D) x 30(H)mm. Ideal for workshop use & can be wall mounted.

- Stack multiple units together for larger storage.
- Overall size 280(W) x 130(D) x 210(H) mm.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6323	\$24.95	\$22.35	\$19.70

33 DRAWER PARTS CABINET

A very useful cabinet with 8 rows of 4 pull out drawers (32 drawers) plus one full width pull out drawer at the bottom for larger items (total 33 drawers). Each small drawer is 125mm deep and 85mm wide. The unit can be free standing, or, wall mounted if required. Ideal for storage requirements and workshop.

- Overall dimensions: 414(H) x 304(W) x 135(D)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HB-6330	\$24.95	\$22.50	\$19.95

LET'S POINT YOU TO THE RIGHT PAGE...

Connectors & Cable

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HIGH CURRENT CONNECTORS

Used widely in both domestic and industry, you'll find these connectors in many 4WD, boating, automotive and other industry applications. Supplied individually with a pair of contacts, all 5 current ratings have an operating temperature of -20° to +120°C.

INDIVIDUAL NESTING

They are genderless which means that there is no separate plug and socket and can be easily stacked to make custom configurations. Supplied as a red and black pair with contacts.



Specifications	PT-4405	PT-4406	PT-4407
Contact Rating	30A	45A	75A
Voltage	600V (AC or DC)	600V (AC/DC)	600 (AC or DC)
Contact Wire Size	1.63-2.59mm (10-14AWG), closed barrel	1.63-2.59mm (10-14AWG), open barrel	1.3mm - 13mm (#6 - #16AWG)
Max Wire Insulation Dia	4.4mm	4.4mm	1.3 - 13.3mm
Contact Retention Force	9kgs (20lbs)	9kgs (20lbs)	22kgs (50lbs)
Operating Temperature	-40 to +125°C	-40 to +125°C	-40 to +125°C

	Cat.	Qty 1+	Qty 10+	Qty 50+
30A	PT-4405	\$4.95	\$4.45	\$3.90
45A	PT-4406	\$4.95	\$4.45	\$3.90
75A	PT-4407	\$11.95	\$10.70	\$9.50

15A RED & BLACK POWERPOLE HIGH CURRENT CONNECTORS

These are genderless which means that there is no separate plug and socket and can be easily stacked to make custom configurations. Compact to fit in tight places but rugged enough to handle most current loads. Supplied as a red and black pair with contacts.

- Contact Rating: 15A
- Voltage: 600V (AC or DC)
- Operating Temperature: -20 to +105°C



	Cat.	Qty 1+	Qty 10+	Qty 50+
Powerpole	PT-4402	\$3.95	\$3.55	\$3.15

ANDERSON POWERPOLE SERIES 4 PIN DATA CONNECTOR

A genderless 4 pole signal Anderson connector in a PP15 casing. The design allows you to stack this with the PP15 series 15A Anderson connector (PT-4402) for DC and signal wiring connectivity. It provides a secure quick disconnect for power and signal distribution systems.

- Up to 24 gauge for signal wire connectivity.
- Dimensions: 25(L) x 8(W) x 8(H)mm



	Cat.	Qty 1+	Qty 10+	Qty 50+
Stackable	PT-4403	\$5.95	\$5.50	\$4.75

4 WAY 15A ANDERSON CONNECTORS

These are the high impact and corrosion-resistant black thermoplastic outer shells with a 4 way 15A Anderson® multi-connectors. They allow easy connection and disconnection for the electrical equipment in commercial and industrial applications. The cable clamps provides strain relief and integral latches to prevent any accidental disconnections of your equipment. The positive latching provides security in applications where shock or vibration may be severe and the integral strain relief to reduce the risk of wire breakage.

ANDERSON CONNECTOR - PT-4434

- Dimensions: 57(L) x 32(W) x 22(H)mm

ANDERSON CONNECTOR WITH LATCH - PT-4436

- Dimensions: 53(L) x 32(W) x 22(H)mm



	Cat.	Qty 1+	Qty 10+	Qty 50+
4 Way	PT-4434	\$12.95	\$11.35	\$10.35
4 Way with Latch	PT-4436	\$12.95	\$11.35	\$10.35

HIGH CURRENT CONNECTORS & ADAPTORS

HIGH CURRENT CONNECTORS

ANDERSON CONNECTORS - PLUG & SOCKET

These little connectors can handle up to 600 volts continuous in AC or DC with maximum current of 10A. The green housing provides a visual indication of the ground terminal. Suitable for use in numerous applications from automotive to aviation. They will fit wire size from 14-16 AWG (2.1 to 1.3 mm²). Supplied as plug and socket pair.

NEW
2015

- Plug Dimension: 27.5(H) x 8(L) x 8(W)mm
- Socket Dimension: 24.5(H) x 8(L) x 8(W)mm



↑		Cat.	Qty 1+	Qty 10+	Qty 50+
	10A	PT-4416	\$5.95	\$5.50	\$4.75

ANDERSON 50A HIGH CURRENT CONNECTORS

Used widely in both domestic and industry, you'll find this connector in many 4WD applications, boating, automotive and other industries. Supplied as a moulded 2 pole with contacts



Specifications	PT-4425	PT-4427	PT-4420
Contact Rating	50A	50A	50A
Contact Wire Size	#8 AWG	#12-10 AWG	13.3mm ² (#6 AWG)
Voltage Rating	600V (AC or DC)	600V (AC or DC)	600V (AC or DC)
Max Wire Insulation Diameter	11mm	11mm	11mm
Contact Retention Force	22kg	22kg	22kg
Operating Temperature	-20 to +105°C	-20 to 105°C	-20 to +120°C
Anderson Part No.			SB50-6319

⬆		Cat.	Qty 1+	Qty 10+	Qty 50+	
	8 AWG	50A	PT-4425	\$9.95	\$8.75	\$7.75
	12-10 AWG	50A	PT-4427	\$9.95	\$8.75	\$7.75
	6 AWG	50A	PT-4420	\$9.95	\$8.75	\$7.75

MOULDED PAIR

Used widely in both domestic and industry, you'll find this connector in many 4WD applications, boating, automotive and other industries. Supplied as a moulded 2 pole with contacts.



Specifications	PT-4422	PT-4424
Contact Rating	120A	175A
Contact Wire Size	3.6mm ² (#2 AWG)	53.5mm ² (#1/0 AWG)
Voltage Rating	600V (AC or DC)	600V (AC or DC)
Max Wire Insulation Diameter	14.6mm	19mm
Contact Retention Force	45.5kg (100lbs)	137kg (300lbs)
Operating Temperature	-20 to +125°C	-20 to +125°C
Anderson Part No.	B120-6800G1	SB175-6325G1

↑		Cat.	Qty 1+	Qty 10+	Qty 50+
	120A	PT-4422	\$19.95	\$17.70	\$15.70
	175A	PT-4424	\$29.95	\$26.90	\$23.70

WATERPROOF ANDERSON CONNECTORS

These soft shell boots provide water, dirt, chemical and UV protection for the high current Anderson connectors. The durable boots shield the connectors from water and dirt to IP64 when connected or by itself when the integral cover is used. The terminals of the rubber boot can also be customised to fit cables in-between 12-6 AWG (4-16mm²) wires.

NEW
2015

- IP64 protection
- Resistant to UV, Roadway Chemical and Ozone
- Splash resistant when connected and by itself when the integral cover is used
- Customise boot terminals to fit your cables from 12-6 AWG which is 4-16mm²
- Mountable
- Easy to use

Dimensions when connected: 151(H) x 55(W) x 160(L)mm



50A LOAD RUBBER BOOT PT-4428

- Dimensions: 85(H) x 55(L) x 20(W)mm

50A SOURCE RUBBER BOOT PT-4429

- Dimensions: 85(H) x 55(L) x 20(W)mm

120A BOOT LOAD SIDE PT-4431

- Dimensions: 112(H) x 57(L) x 39(W)mm

120A BOOT SOURCE SIDE PT-4432

- Dimensions: 118(H) x 59(L) x 39(W)mm

175A BOOT LOAD SIDE PT-4438

- Dimensions: 135(H) x 77(L) x 42(W)mm

175A BOOT SOURCE SIDE PT-4439

- Dimensions: 135(H) x 68(L) x 42(W)mm

↑		Cat.	Qty 1+	Qty 10+	Qty 50+
	Boots to Suit 50A Male	PT-4428	\$14.95	\$13.45	\$11.95
	Boots to Suit 50A Female	PT-4429	\$14.95	\$13.45	\$11.95
	Boots to Suit 120A Male	PT-4431	\$17.95	\$16.10	\$14.35
	Boots to Suit 120A Female	PT-4432	\$17.95	\$16.10	\$14.35
	Boots to Suit 175A Male	PT-4438	\$19.95	\$17.95	\$15.70
	Boots to Suit 175A Female	PT-4439	\$19.95	\$17.95	\$15.70

FOR HEAVY CURRENT CABLE
SUITABLE FOR THESE
CONNECTORS, SEE PAGE 212

DUST/WATER RESISTANT RUBBER COVERS

A water and dust resistant rubber cover to suit our Anderson style connectors.



↑	Suits	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4424	PM-4430	\$12.95	\$11.35	\$10.35
	PT-4420	PM-4434	\$8.95	\$7.95	\$6.95

DUSTCOVER FOR 120A ANDERSON STYLE CONNECTORS

Rubber water and dust resistant cover for our 120A Anderson style connector PT-4422.



↑	Suits	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4422	PM-4432	\$9.95	\$8.75	\$7.75

HANDLES FOR ANDERSON STYLE CONNECTORS

Facilitates easy connection/ disconnection. Ensures a secure grip, even with gloved hands for easier charging of electric forklifts etc.



Suits Anderson Style Connectors

50A Cat. PT-4420 Cat PM-4436

120A Cat. PT-4422 Cat PM-4438

175A Cat. PT-4424 Cat PM-4439

↑	Suits	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4420	PM-4436	\$7.95	\$6.95	\$6.75
	PT-4422	PM-4438	\$7.95	\$6.95	\$6.75
	PT-4424	PM-4439	\$12.95	\$11.35	\$10.95

50A PLUG TO INSULATED BATTERY CLAMPS

Tough insulated battery clamps connected to a high current plug. Ideal for connecting a solar panel, portable fridge, compressor, or inverter to a battery.



- 8 AWG cable
- 50A rated
- Insulated battery clamps
- Length: 300mm

↑		Cat.	Qty 1+	Qty 10+	Qty 50+
		PT-4449	\$19.95	\$17.95	\$15.70

HIGH CURRENT 60A LEADS

A series of high current connector leads for automotive, caravan, 4WD or industrial interconnection. The design of the Anderson connector housing is genderless, whereby each connector simply interconnects with another so you can't plug them in the wrong way - one less thing to worry about! Each lead is pre-made with machine crimped terminations, and tinned copper cable. Connectors are rated at 50Amps, with either 8AWG cable or 16AWG cable fitted depending on the model.



Five versions available:

50A PLUG EXTENSION LEAD, 8AWG 5M

50A PIGGYBACK LEAD, 8AWG, 300MM

50A EYE TERMINAL LEAD, 8AWG, 300MM

50A TO 15A CIGARETTE PLUG LEAD, 16AWG, 300MM

ANDERSON 50A TO 15A CIGARETTE SOCKET LEAD, 16AWG, 300MM

PT-4440

PT-4442

PT-4444

PT-4446

PT-4448



↑		Cat.	Qty 1+	Qty 10+	Qty 50+
	Plug Extension Lead - 5m	PT-4440	\$74.95	\$67.50	\$59.95
	Piggyback Lead	PT-4442	\$34.95	\$31.45	\$27.90
	Eye Terminal Lead	PT-4444	\$14.95	\$13.45	\$11.95
	Cigarette Plug Lead	PT-4446	\$16.95	\$14.95	\$13.35
	Cigarette Socket Lead	PT-4448	\$16.95	\$14.95	\$13.35

STANDARD QUICK CONNECTORS

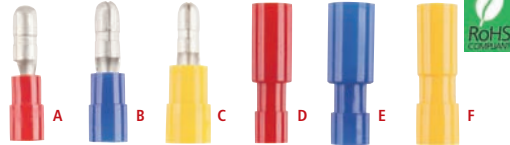
TECH TALK!

NYLON INJECTION MOULDING

Unlike the majority of quick crimp connectors available on the market, our range of standard quick connectors are made with a nylon injection moulded insulation as opposed to the heat shrunk vinyl insulation most others feature. The injection-moulded nylon insulation is temperature rated to 105°C, and features a moulded funnel taper in the insulation for easy cable entry.

BULLETS

- Red: Cable entry size 4.3mm
Wire size 0.75 - 1mm dia
- Blue: Cable entry size 4.5mm
Wire size 1.5 - 2.5mm dia.
- Yellow: Cable entry size 6.6mm
Wire size 4 - 6mm dia.



ID	Type	Size	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
A	Male	4	8	PT-4500	\$3.50	\$3.15	\$2.75	50	PT-4501	\$9.95	\$8.75	\$7.75
B	Male	4	8	PT-4600	\$3.50	\$3.15	\$2.75	100	PT-4601	\$15.95	\$14.35	\$12.70
C	Male	4	8	PT-4700	\$3.75	\$3.30	\$2.95	100	PT-4701	\$18.95	\$16.95	\$14.95
D	Female	4	8	PT-4502	\$3.50	\$3.15	\$2.75	50	PT-4503	\$9.95	\$8.75	\$7.75
E	Female	4	8	PT-4602	\$3.50	\$3.15	\$2.75	100	PT-4603	\$15.95	\$14.35	\$12.70
F	Female	4	8	PT-4702	\$3.75	\$3.30	\$2.95	100	PT-4703	\$18.95	\$16.95	\$14.95

SPADES

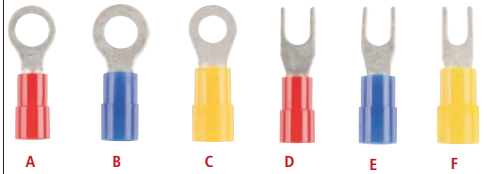
- Red: Cable entry size 4.3mm
Wire size 0.75 - 1mm dia
- Blue: Cable entry size 4.5mm
Wire size 1.5 - 2.5mm dia.
- Yellow: Cable entry size 6.6mm
Wire size 4 - 6mm dia.



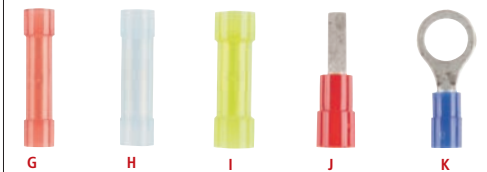
ID	Type	Size	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
A	Male	4.8	8	PT-4518	\$2.75	\$2.45	\$2.15					
B	Male	4.5	8	PT-4609	\$2.75	\$2.45	\$2.15	100	PT-4610	\$14.95	\$13.35	\$11.70
C	Female	4.8	8	PT-4722	\$3.45	\$3.05	\$2.75	100	PT-4721	\$17.95	\$15.95	\$14.35
D	Female	4.8	8	PT-4522	\$2.75	\$2.45	\$2.15	100	PT-4524	\$13.95	\$12.35	\$10.95
E	Female	4.8	8	PT-4622	\$2.75	\$2.45	\$2.15	100	PT-4621	\$14.95	\$13.35	\$11.70
F	Male	6.4	8	PT-4709	\$3.45	\$3.05	\$2.75	100	PT-4710	\$17.95	\$15.95	\$14.35

EYE, FORK, BUTT & BLADES

- Red: Cable entry size 4.3mm / Wire size 0.75 - 1mm dia
- Blue: Cable entry size 4.5mm / Wire size 1.5 - 2.5mm dia
- Yellow: Cable entry size 6.6mm / Wire size 4 - 6mm dia.



ID	Type	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
A	Eye	8	PT-4514	\$2.75	\$2.45	\$2.15
B	Eye	8	PT-4614	\$2.75	\$2.45	\$2.15
C	Eye	8	PT-4714	\$3.75	\$3.30	\$2.95
D	Fork	8	PT-4523	\$2.75	\$2.45	\$2.15
E	Fork	8	PT-4623	\$2.75	\$2.45	\$2.15
F	Fork	8	PT-4723	\$3.75	\$3.30	\$2.95
G	Butt	8	PT-4527	\$2.75	\$2.45	\$2.15
H	Butt	8	PT-4627	\$2.75	\$2.45	\$2.15
I	Butt	8	PT-4727	\$3.75	\$3.30	\$2.95
J	Blade	8	PT-4516	\$2.75	\$2.45	\$2.15
K	Eye	8	PT-4618	\$2.75	\$2.45	\$2.15



ID	Type	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
A	Eye	100	PT-4515	\$13.95	\$12.35	\$10.95
B	Eye	100	PT-4615	\$14.95	\$13.35	\$11.70
C	Eye	100	PT-4715	\$17.95	\$15.95	\$14.35
D	Fork	100	PT-4529	\$13.95	\$12.35	\$10.95
E	Fork	100	PT-4624	\$14.95	\$13.35	\$11.70
F	Fork	100	PT-4724	\$17.95	\$15.95	\$14.35
G	Butt	100	PT-4528	\$13.95	\$12.35	\$10.95
H	Butt	100	PT-4628	\$14.95	\$13.35	\$11.70
I	Butt	100	PT-4728	\$17.95	\$15.95	\$14.35
J	Blade	100	PT-4517	\$13.95	\$12.35	\$10.95
K	Eye	8	PT-4718	\$3.75	\$3.30	\$2.95

LARGE SPADE QUICK CONNECTORS

- Spade socket
- 9.5mm
- Pack of 4



Suits 60A horn relay SY-4074

↑	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	PT-4717	\$3.95	\$3.45	\$3.15

FERRULE CRIMP CONNECTORS



ID	Pk	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
A	20	0.75mm ²	PT-4433	\$2.95	\$2.60	\$2.30
B	20	1.50mm ²	PT-4533	\$2.95	\$2.60	\$2.30
C	20	2.5mm ²	PT-4633	\$2.95	\$2.60	\$2.30

NON-INSULATED EYE TERMINALS

A range of non-insulated eye terminals for a variety of electronic or automotive applications.

See website for specifications



ID	Hole	Cable Entry	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
A	4mm	2.5mm ²	8	PT-4930	\$2.75	\$2.45	\$2.15
B	6mm	4mm ²	8	PT-4932	\$2.75	\$2.45	\$2.15
C	6mm	6mm ²	8	PT-4934	\$2.75	\$2.45	\$2.15
D	8mm	6mm ²	8	PT-4935	\$2.75	\$2.45	\$2.15
E	8mm	10mm ²	8	PT-4936	\$3.45	\$3.05	\$2.75
F	8mm	25mm ²	4	PT-4937	\$3.95	\$3.45	\$3.15
G	8mm	35mm ²	4	PT-4938	\$5.95	\$5.25	\$4.75
H	8mm	50mm ²	2	PT-4939	\$4.95	\$4.45	\$3.90

LET'S FIND EVERYTHING YOU NEED!

FROM
\$39.95
TH-1829



CRIMPING TOOLS

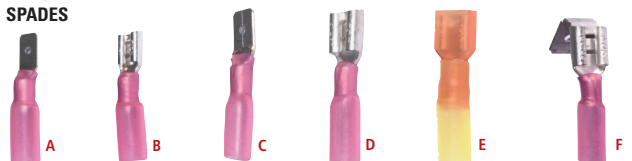
P133

CRIMP LUGS & TERMINALS

SELF SEALING QUICK CONNECTORS

The unique heat sensitive sealing gel in these quick connectors will automatically flood the crimp joint with sealant as the heatshrink sleeve is heated. The resulting crimp connection is water and corrosion resistant and has good strain relief properties. 11 styles to choose from.

SPADES



ID	Type	Size	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
A	Male	4.8mm	8	PT-4818	\$5.95	\$5.25	\$4.75
B	Female	4.8mm	8	PT-4822	\$5.95	\$5.25	\$4.75
C	Male	6.4mm	8	PT-4809	\$5.95	\$5.25	\$4.75
D	Female	6.4mm	8	PT-4807	\$5.95	\$5.25	\$4.75
E	Female Ins.	6.4mm	8	PT-4825	\$6.95	\$6.25	\$5.50
F	Piggyback	6.4mm	8	PT-4810	\$6.95	\$6.25	\$5.50

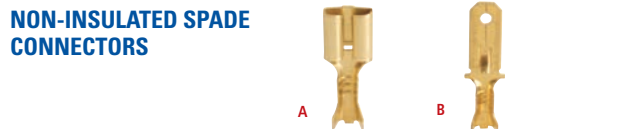
EYE, FORK, BUTT & BULLETS



ID	Type	Size	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
A	Eye	5.3(ID)/8.0(OD)	8	PT-4814	\$5.95	\$5.25	\$4.75
B	Fork	3.7(ID)/5.7(OD)	8	PT-4823	\$5.95	\$5.25	\$4.75
C	Butt	4.7	8	PT-4827	\$6.95	\$6.25	\$5.50
D	Male	4	8	PT-4800	\$5.95	\$5.25	\$4.75
E	Female	4	8	PT-4802	\$6.95	\$6.25	\$5.50

CRIMP CONNECTORS

NON-INSULATED SPADE CONNECTORS



ID	Type	Size	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
A	Socket	6.3mm	10	PT-4630	\$2.75	\$2.45	\$2.15
B	Plug	6.3mm	10	PT-4631	\$2.75	\$2.45	\$2.15

6.3MM PCB MOUNT PCB SPADE CONNECTORS

These PCB mount male spade connectors are commonly used to connect power to a PCB board. They work perfectly with 6.3mm female spade connectors.

- PCB tag: 6.3mm
- Pitch: 5mm
- Current rating: 30A
- Thickness: 0.81mm

↑	Size	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
PCB Mount	6.3mm	8	PT-4914	\$2.65	\$2.35	\$2.10

6.3MM CHASSIS MOUNT DOUBLE SPADE CONNECTORS

A pack of 8 pieces of 6.3mm chassis mount double spade connectors.

- Double Ended 6.3mm
- Chassis Mounting Hole: 4(Dia.)mm

↑	Size	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
Chassis	6.3mm	8	PT-4916	\$2.65	\$2.35	\$2.10

PHONE TYPE CRIMP LUGS

- Brass Spade width - 3.2mm
- Cable entry 2.5mm

↑	Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
15	PT-4520	\$2.95	\$2.60	\$2.30	
100	PT-4521	\$12.95	\$11.35	\$10.35	

FOR GOLD PLATED TERMINALS SEE PAGE 251

QUICK CONNECT PACK

A box of all the standard 1/4" (6.35mm) QC tabs and receptacles, but also the odd QC sizes ie: 3.3mm and 4.8mm sizes. Total 160 pieces. Includes the following:

- 10 x 6.4mm female crimp spade lugs wire dia 1.8mm
- 10 x 6.4mm female crimp spade lugs wire dia 3.5mm
- 10 x Close end wire crimpers - dia 2.6mm
- 10 x Close end wire crimpers - dia 3.8mm
- 5 x Contact wire connectors
- 10 x Female bullet connectors - insulated
- 10 x Male bullet connectors - insulated
- 5 x 3 way spade lug connectors 6.8mm
- 5 x spade piggyback connectors 6.8mm
- 10 x 4.9mm female spade lugs
- 10 x 8.4mm hole dia ring terminals
- 10 x 5.7mm hole dia ring terminals
- 10 x 5.3mm hole dia spade terminals
- 10 x 4.3mm hole dia spade terminals
- 5 x 3.5mm dia butt connectors
- 5 x 2.3mm dia butt connectors
- 5 x 1.8mm dia butt connectors
- 10 x 3.3mm spade connectors (tweeter connectors)
- Beware of others with less than 160 pieces.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PT-4530	\$22.95	\$20.35	\$18.35

MORE CRIMPING TOOLS ON PAGES 133

AUTOMOTIVE CRIMP TOOL WITH 80 CONNECTORS

The tool will cut & strip wire, crimp connectors and also cut a range of metric bolts.

- 8 each of male & female blue bullets
- 8 each of male & female blue spades
- 8 x red eye connectors
- 8 each of male & female red bullets
- 8 each of male & female red spades
- 8 x blue butt joiners



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1848	\$13.95	\$12.35	\$10.95

300 PIECE QC CRIMP CONNECTOR PACK

Contains 300pcs of only the most commonly-used quick connectors from our range of separately sold QC connectors. Insulation is injection-moulded Nylon rated to 105°C, with a moulded funnel taper in the insulation for easy cable entry. Beware of other QC connector packs that contain cheap vinyl connectors. Pack contains (300pcs in total):

RED - FOR 0.75 - 1.0MM CABLE

- 20 x female/20 x male bullet
- 20 x 4mm/20 x 5mm ring
- 20 x 4mm fork/25 x female spade
- 25 x male spade/10 x cable joiner

YELLOW - FOR 4-6MM CABLE

- 5 x 5mm/5 x 6mm ring
- 5 x cable joiner

BLUE - FOR 1.5 - 2.5MM CABLE

- 15 x female/20 x male bullet
- 20 x 4mm/10 x 6mm ring
- 25 x female/25 x male spade
- 10 x cable joiner

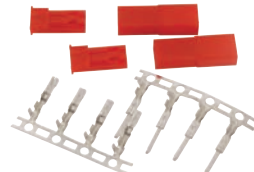


↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PT-4536	\$34.95	\$31.45	\$27.90

JST CRIMP

JST CRIMP CONNECTORS 2 WAY

JST type crimp connectors for hobby use. Extensively used on batteries and other connectors in RC hobbies and models. Sold as a pair of 2 mating M/F connectors. Suitable for cable up to 1.3mm OD.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4452	\$4.95	\$4.45	\$3.90

DEANS STYLE

DEANS STYLE 60A 2 POLE GOLD PLATED CONNECTOR SET

These are the industry standard in high performance connectors. Rated number one by RC Car Action, the world's leading RC car racing magazine. These connectors offer considerably less resistance than their competitors and are rated at 60 amps.

- Supplied as a pair.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4450	\$3.95	\$3.45	\$3.15

TERMINAL BLOCKS & CONNECTORS

"JOW" CABLE CLAMP CONNECTORS

Designed to reduce electrical installation time and to increase efficiency. These easy-to-use connectors eliminates the need to strip, twist and crimp connection wires. Simply insert your wire into the clamp opening and snap it shut using your hands or small pliers depending on wire gauge to make the connection. The precision-sharpened connector blades borrows the IDC configuration that cut through the wires create a connection. Available in two shapes - "I" type and "T" type. "I" type are used for end to end connections whereas the "T" type for parallel connections. Ideal for applications such as: low voltage LEDs, residential, automotive, communication and broadcasting.

NEW
2015

- Avoid stripping, twisting or crimping cables together eliminates need to tape cables
- Creates an IP33 connection
- Electrically Safety approved
- Handles up to 600VAC
- RoHS compliant



Specifications	PT-4640	PT-4641
Suitable for cable between	27-20 (AWG), Cross section (mm²): 0.2-0.5	19-17 (AWG), Cross section (mm²): 0.75
Max current (240VAC)	3A	10A
Connection loss (Ohm)	0.0018	0.0010
Dimensions/Weight	25(L) x 5.5(W) x 5.5(H)mm/0.8g	30(L) x 6(W) x 6(H)mm/1g

Specifications	PT-4643	PT-4650
Suitable for cable between	13-12 (AWG), Cross section (mm²): 2.5	27-20 (AWG), Cross section (mm²): 0.2-0.5
Max current (240VAC)	20A	3A
Connection loss (Ohm)	0.0001	0.0018
Dimensions/Weight	36(L) x 7.7(W) x 7.7(H)mm/2.5g	25(L) x 5.5(W) x 5.5(H)mm/1g

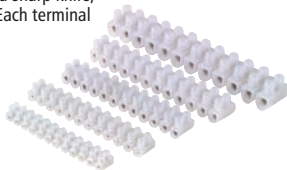
Specifications	PT-4651	PT-4653
Suitable for cable between	19-17 (AWG), Cross section (mm²): 0.75	13-12 (AWG), Cross section (mm²): 2.5
Max current (240VAC)	10A	20A
Connection loss (Ohm)	0.0010	0.0001
Dimensions/Weight	30(L) x 6(W) x 6(H)mm/1.6g	37(L) x 7.7(W) x 7.7(H)mm/3.3g

↑				Cat.	Qty 1+	Qty 4+	Qty 10+
In-line	I Type	3A	Pack of 6	PT-4640	\$4.95	\$4.45	\$4.00
In-line	I Type	10A	Pack of 4	PT-4641	\$4.95	\$4.45	\$4.00
In-line	I Type	20A	Pack of 2	PT-4643	\$5.95	\$5.50	\$4.75
Parallel	T Type	3A	Pack of 6	PT-4650	\$5.95	\$5.50	\$4.75
Parallel	T Type	10A	Pack of 4	PT-4651	\$5.95	\$5.50	\$4.75
Parallel	T Type	20A	Pack of 2	PT-4653	\$6.95	\$6.25	\$5.50

TERMINAL STRIPS

Still 12 way and capable of being divided with a sharp knife, however, the screw retention is much sturdier. Each terminal block has a mounting hole on a fixed pitch.

Specifications	
Material	Polyamide 66 (nylon)
	UL94V-2 flame retardant
Temperature	-35°C to 110°C
Voltage	250-450V
Colour	Natural



Current	Cable Dia	Length	Pitch	Cat.	Qty 1+	Qty 4+	Qty 10+
5A	3.3mm	114.5mm	10mm	HM-3194	\$1.75	\$1.55	\$1.40
10A	4.2mm	128.8mm	11mm	HM-3196	\$1.95	\$1.75	\$1.55
15A	4.5mm	136.8mm	12mm	HM-3200	\$2.65	\$2.30	\$2.07
30A	5.6mm	164.5mm	15mm	HM-3198	\$2.85	\$2.53	\$2.23
60A	6.6mm	193mm	16.3mm	HM-3204	\$4.95	\$4.45	\$3.90

PLUG/SOCKET TERMINAL STRIP

Semi permanent connection up to 12 poles.

- Reliable screw down termination.
- 10A per pole.
- Supplied as a matching pair



↑		Qty 1+	Qty 4+	Qty 10+
	HM-3202	\$12.95	\$11.35	\$10.35

CERAMIC TERMINAL BLOCKS

Glazed porcelain terminal blocks are ideal for high temperature situations, such as in lighting. Ask us for competitive bulk prices.

Images not
to scale

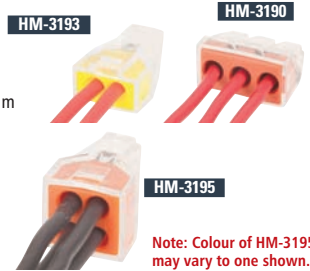


↑	Current	Voltage	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Wire Medium	10A	250VAC	HM-3182	\$0.85	\$0.75	\$0.65
3 Wire Small	5A	380VAC	HM-3183	\$0.90	\$0.81	\$0.72
3 Wire Large	30A	380VAC	HM-3185	\$1.35	\$1.20	\$1.05

PLUG-IN SPRING TERMINAL BLOCKS

A range of easy-to-use, push-wire terminal blocks that make joining wires a breeze. No tools necessary! Simply insert the stranded or solid wire and it will bite down to hold the wire in place. Rated for high voltage applications but would also suit lower voltage applications like 12V lighting.

- 240V, 24A rated
- 2 WAY - YELLOW** Cat. HM-3193
 - Suits 0.75 - 2.5mm², 18 - 13AWG.
 - Dimensions: 19.5(L) x 13.5(H) x 10(W)mm
- 3 WAY - RED** Cat. HM-3190
 - Suits 1.5 - 6.0mm² solid core cable
 - Dimensions: 26(W) x 20(L) x 14(H)mm



- 4 WAY** Cat. HM-3195
 - Suits 0.75 - 2.5mm², 18 - 13AWG
 - Dimensions: 19(L) x 12(W) x 14(D)mm

Note: Colour of HM-3195 may vary to one shown.

↑	Suits	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Way	0.75 - 2.5mm²	2	HM-3193	\$0.95	\$0.85	\$0.75
4 Way	0.75 - 2.5mm²	2	HM-3195	\$1.20	\$1.05	\$0.95
3 Way	1.5 - 6.0mm²	2	HM-3190	\$2.45	\$2.21	\$1.95

2 & 3 WAY CAGE CLAMP® CONNECTORS

These compact connectors use Cage Clamp® fittings that can connect up to 5 stripped, fine-stranded conductors with cross sections from 0.08 to 2.5mm², and solid or ferruled wires up to 4.0mm².

- Fine-stranded: 0.08 - 2.5mm², 28 - 14AWG
- Solid/ferruled: 0.08 - 4.0mm², 28 - 12AWG
- 240V, 32A rated

- 2 WAY** Cat. HM-3197
 - Dimensions: 21(L) x 14(H) x 12(W)mm
- 3 WAY** Cat. HM-3199
 - Dimensions: 21(L) x 17(W) x 14(H)mm



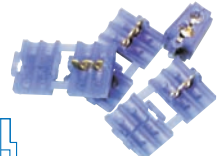
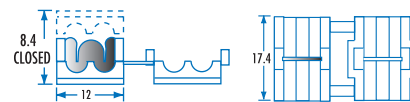
↑	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Way	2	HM-3197	\$2.15	\$1.90	\$1.70
3 Way	2	HM-3199	\$2.45	\$2.21	\$1.95

QUICK SPLICE

CONTACT CONNECTORS

Simply wrap around the existing wire and new wire and squeeze. Connector cuts through insulation and makes contact without damaging the conductor.

- Fully insulated once on.



↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-1206	\$1.95	\$1.75	\$1.55

QUICK SPLICE CONNECTORS

Simply insert your wires and squeeze it closed to connect and crimp. Quick, easy, and secure. Nylon insulation rated to 105 °C



ID	Type	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
A	22-18AWG	6	PT-4537	\$2.75	\$2.45	\$2.15
B	16-14AWG	6	PT-4637	\$2.75	\$2.45	\$2.15
C	12-10AWG	6	PT-4737	\$2.75	\$2.45	\$2.15

CABLE CONNECTORS

CRIMP WIRE CONNECTORS

The easy way to connect 2 or 3 wires together. Simply insert into the connector, & squeeze with a pair of pliers. They are filled with sealant to provide moisture resistance. Accepts cable up to 1.08mm OD.



↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
(6 x 2 wire) & (2 x 3 wire)	8	HP-1214	\$4.95	\$4.45	\$3.90
2 Wire	50	HP-1270	\$10.95	\$9.75	\$8.75
3 Wire	50	HP-1272	\$14.95	\$13.35	\$11.70

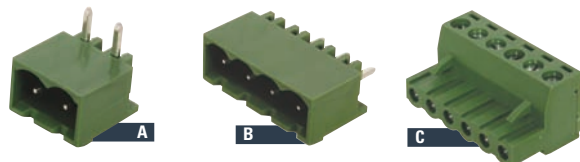
TERMINAL BLOCKS

HEADERS/ TERMINAL BLOCKS & CONNECTORS

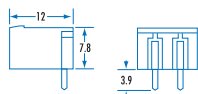
5.08MM HIGH QUALITY PLUGGABLE TERMINAL BLOCKS/HEADERS

Available in both horizontal-plug and vertical-plug versions, these quality headers simply solder to a PC board and are for the Pluggable Terminal Blocks (see below).

- Made from Polyamide66 plastic (UL94V-0) • 1.0mm tin-plated brass solder pins
- Excellent current and insulation characteristics.



Specifications	
Current rating	12A, 300VAC
Insulation withstands volt	2000VAC min
Insulation resistance	>5000MΩ 500VDC
PCB hole diameter	1.5mm
Pitch	5.08mm (0.200 inch)



The plug version to suit the above headers - these terminal blocks are easily plugged in, and feature nickel-plated brass cage clamps, tin-plated phosphor-bronze contacts, M3 nickel-plated steel screws.

HORIZONTAL PC MOUNT (PIC A)

↑ Poles	Cat.	Qty 1+	Qty 4+	Qty 10+
2	HM-3102	\$0.95	\$0.85	\$0.75
3	HM-3103	\$1.65	\$1.45	\$1.30
4	HM-3104	\$1.95	\$1.75	\$1.55
6	HM-3106	\$2.95	\$2.60	\$2.30
8	HM-3108	\$3.95	\$3.45	\$3.15

VERTICAL PC MOUNT PLUGGABLE HEADERS (PIC B)

↑ Poles	Cat.	Qty 1+	Qty 4+	Qty 10+
2	HM-3112	\$0.95	\$0.85	\$0.75
3	HM-3113	\$1.65	\$1.45	\$1.30
4	HM-3114	\$1.95	\$1.75	\$1.55
6	HM-3116	\$2.95	\$2.60	\$2.30
8	HM-3118	\$3.95	\$3.45	\$3.15

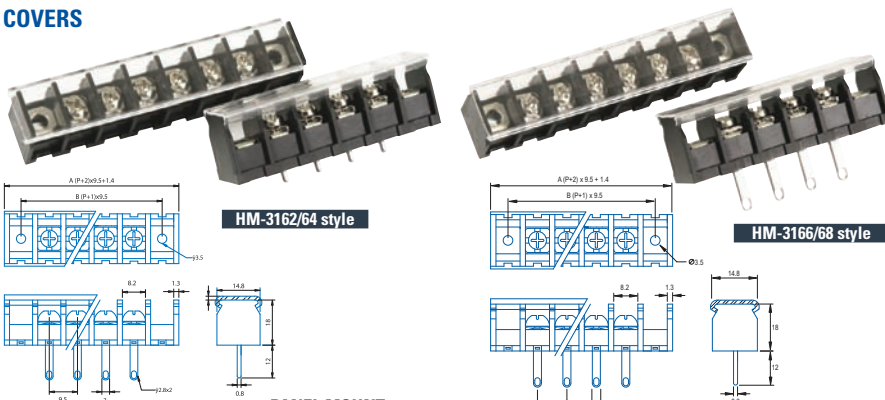
SCREW TERMINAL SOCKETS (PIC C)

↑ Poles	Width(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
2	11.40	HM-3122	\$2.35	\$1.95	\$1.85
3	16.40	HM-3123	\$3.60	\$3.15	\$2.75
4	21.40	HM-3124	\$4.95	\$4.45	\$3.90
6	31.40	HM-3126	\$6.95	\$6.25	\$5.50
8	41.40	HM-3128	\$9.20	\$8.25	\$7.25

TERMINAL BARRIERS

TERMINAL BARRIERS - TRANSPARENT COVERS

Specifications	All
Pitch	9.5mm
Barrier Material	Thermoplastic (UL-94V-0), Black
Terminals	Tin Plated Brass (Standard)
Screws	Nickel Plated Steel
Wire Range AWG	12-22 STR
Rating	25 Amp, 300VAC
Cover Material	PC
Insulation withstands voltage	AC 2000V/Min
Insulation Resistance	500Mohm or more at 500V



PC MOUNT

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
4 Way	HM-3162	\$3.95	\$3.45	\$3.15
6 Way	HM-3164	\$5.50	\$4.90	\$4.30

SURFACE MOUNT SCREW TERMINAL STRIPS

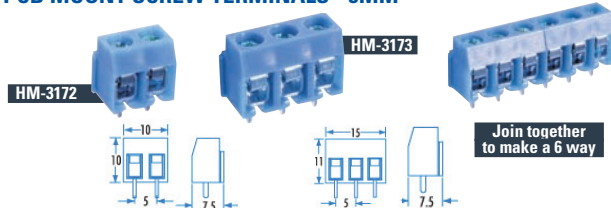
These units feature the ability to terminate 2 or 3 sets of wires securely with the option of changing or adding connections. In classic barrier strip fashion there is a comprehensive fence between each terminal. Each sturdy block has 2 x 4mm mounting holes at each end and a insulating body with high impact plastic.

Two models available:

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Way	HM-3167	\$2.95	\$2.60	\$2.30
3 Way	HM-3169	\$3.45	\$3.05	\$2.75



PCB MOUNT SCREW TERMINALS - 5MM



Ideal for those situations where wires leave a PCB. Just solder the terminal strip to the PCB and connect wires. 2 way (HM-3172) and 3 way (HM-3173) are interlocking, so you can make up whatever size you require using these - see 6 way pictured.

↑		Qty 1+	Qty 4+	Qty 10+
2 Way	HM-3172	\$1.20	\$1.05	\$0.95
3 Way	HM-3173	\$1.55	\$1.35	\$1.20

WEIDMULLER PCB MOUNT SCREW TERMINALS - 5.08MM

These are 5.08mm spacing, come in 2 and 3 way, are interlocking and orange in colour.



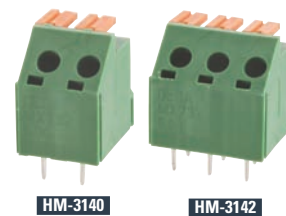
↑		Qty 1+	Qty 4+	Qty 10+
2 Way	HM-3130	\$1.20	\$1.05	\$0.95
3 Way	HM-3132	\$1.55	\$1.35	\$1.20

PCB SPRING TERMINAL BLOCKS

These PCB terminal blocks retain the wire securely by a spring type clamp. The wire is held very securely but can be quickly released by depressing a release lever. The wire can be inserted/released indefinitely with virtually no deterioration of the contact/spring assembly. Both 2 & 3 pole are available and the housing of each is dove tailed to stack together and make any number of poles.

- Pitch: 5.0mm
- Housing material: PA66
- Contact/spring assembly: Stainless Steel
- Will accept wires from 22-14AWG
- Current rating 12.0A @ 300VAC
- Temperature rating: -40 to +105 °C
- Power rating: 5kV rated / 250VAC Cat III
- Dimensions:

2-Way 10(L) x 13(W) x 15(H)mm,
3-Way 15(L) x 13(W) x 15(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Way	HM-3140	\$2.20	\$1.95	\$1.75
3 Way	HM-3142	\$2.90	\$2.60	\$2.30

HEADER CONNECTORS

0.1" (2.54MM) LOCKING & POLARISING HEADER CONNECTORS

A range of connectors for PCB mounting that allow circuit boards to be plugged together at right angles or end-to-end, or cables to be plugged onto circuits boards at right angles or end-on at the edge of the PCB. Both plugs and sockets may be butted up end-to-end to form connectors with any number of ways from 2 upwards.

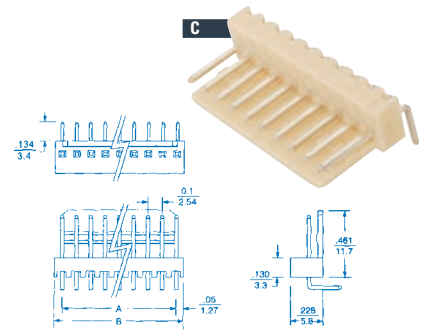
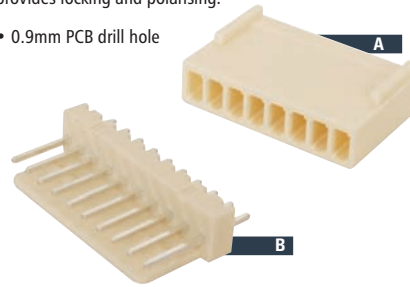
Technical Information:	All
Voltage:	250V
Current: Brass Crimp/Tin plated:	2.5A max. (solderable)
Contact Resistance:	20mΩ max
Dielectric Withstanding Voltage:	1500VAC
Insulation Resistance:	50MΩ
Contact Insertion force:	681g
Contact Retention to Housing:	3.63kg
Mating Force:	199g max
Normal Force:	200g min
Housing:	UL 94v-0 White nylon
Temperature:	0 to +75°C

0.1" HEADER SOCKETS, LOCKING & POLARISED See photograph "A"

↑ Pins		Qty 1+	Qty 4+	Qty 10+
2	HM-3402	\$0.50	\$0.45	\$0.40
3	HM-3403	\$0.55	\$0.47	\$0.42
4	HM-3404	\$0.65	\$0.57	\$0.50
6	HM-3406	\$0.75	\$0.65	\$0.60
8	HM-3408	\$0.95	\$0.85	\$0.75
10	HM-3410	\$1.10	\$0.95	\$0.85

Both plugs are wafer design into which square, tin-plated brass pins have been inserted. These pins protrude 3.4 mm on one side, and should be soldered to the PCB. The nylon wafer sits on the PCB and is 3.3 mm thick. The back provides locking and polarising.

- 0.9mm PCB drill hole



Suitable crimping tool for 0.1" header sockets is our Cat. TH-1834

0.1" PIN PLUG (STRAIGHT ENTRY, LOCKING & POLARISED) See photograph "B"

↑ Pins		Qty 1+	Qty 4+	Qty 10+
2	HM-3412	\$0.20	\$0.18	\$0.16
3	HM-3413	\$0.30	\$0.25	\$0.24
4	HM-3414	\$0.40	\$0.35	\$0.30
6	HM-3416	\$0.60	\$0.52	\$0.47
8	HM-3418	\$0.80	\$0.70	\$0.62
10	HM-3420	\$1.00	\$0.90	\$0.80

0.1" PIN PLUG (RIGHT ANGLE ENTRY, LOCKING & POLARISED) See photograph "C"

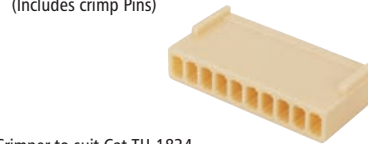
↑ Pins		Qty 1+	Qty 4+	Qty 10+
2	HM-3422	\$0.30	\$0.25	\$0.24
3	HM-3423	\$0.35	\$0.30	\$0.27
4	HM-3424	\$0.40	\$0.35	\$0.30
6	HM-3426	\$0.60	\$0.52	\$0.47
8	HM-3428	\$0.80	\$0.70	\$0.62
10	HM-3430	\$0.90	\$0.80	\$0.70

0.156" (4MM) LOCKING & POLARISING HEADER CONNECTORS

This range is similar to the range shown above, but much more robust. The contacts are rated at 250V @ 7A AC/DC which makes them an ideal power connector to a PCB. They are end to end stackable and commonly seen as the output connector on Switchmode power supplies.

Technical Information	All
Voltage:	250V
Current:	7.0A
Contact Resistance:	20mΩ max
Dielectric Withstanding Voltage:	1500V
Insulation Resistance:	500k Ohm min
Contact Insertion Force:	2.28kg
Contact Retention to Housing:	4.56kg
Wire Pull-Out force:	2.85kg
Mating Force:	0.86kg
Unmating Force:	150g
Durability:	25 cycles
Housing:	Nylon, UL 94V-2
Temperature:	-40 to 105°C

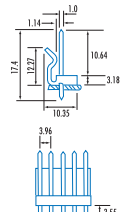
0.156" (4MM) HEADER SOCKETS, LOCKING & POLARISED (Includes crimp Pins)



Crimper to suit Cat TH-1834

↑ Pins		Qty 1+	Qty 4+	Qty 10+
2	HM-3432	\$0.80	\$0.70	\$0.62
3	HM-3433	\$0.90	\$0.80	\$0.70
4	HM-3434	\$1.00	\$0.90	\$0.80
6	HM-3436	\$1.30	\$1.15	\$1.01
8	HM-3438	\$1.40	\$1.25	\$1.10
10	HM-3440	\$1.50	\$1.35	\$1.20

0.156" (4MM) LOCKING & POLARISED, STRAIGHT ENTRY PIN PLUG (To match previous headers).



↑ Pins		Qty 1+	Qty 4+	Qty 10+
2	HM-3442	\$0.30	\$0.25	\$0.24
3	HM-3443	\$0.35	\$0.30	\$0.27
4	HM-3444	\$0.40	\$0.35	\$0.30
6	HM-3446	\$0.60	\$0.52	\$0.47
8	HM-3448	\$0.80	\$0.70	\$0.62
10	HM-3450	\$0.90	\$0.80	\$0.70

DISK DRIVE CONNECTORS

DISK DRIVE - 4 PIN CONNECTORS



DISK DRIVE POWER CONNECTOR - PLUG

Plug for wiring power to any standard drive. Has crimp pins.



DISK DRIVE PCB POWER PLUG

Power plug for PC drives.



DISK DRIVE POWER SOCKET

Socket for wiring power cables for use on any standard drive. Has crimp pins.



DISK DRIVE IDC POWER SOCKET

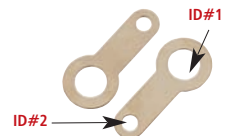
- Insulation displacement type

↑	Pkt	Cat.	Qty 1+	Qty 10+	Qty 50+
	Power Plug	PP-0743	\$1.95	\$1.75	\$1.55
	PCB Power Plug	PP-0744	\$1.45	\$1.30	\$1.15
	Power Socket	PS-0742	\$2.95	\$2.60	\$2.30
	IDC Power Socket	PS-0740	\$3.95	\$3.45	\$3.15

SOLDER LUGS

SOLDER LUGS

- Solder lugs for any screw down connection.
- Length: 17.6mm
 - ID#1: 4.3mm
 - ID#2: 2.0mm



↑ Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
50	HP-1350	\$3.95	\$3.45	\$3.15

TAGSTRIPS

TAGSTRIPS

- Tin plated lugs

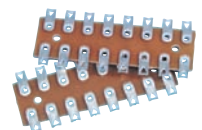


↑ Type	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Way	HM-3302	\$0.60	\$0.52	\$0.47
3 Way	HM-3303	\$0.75	\$0.68	\$0.60
4 Way	HM-3304	\$0.80	\$0.70	\$0.62
5 Way	HM-3305	\$1.00	\$0.85	\$0.75
8 Way	HM-3308	\$1.25	\$1.10	\$1.00

TAGBOARD

2 tagboards per pack with 8 tin plated lugs per side.

- Dimensions: 80(L) x 32(W)mm including lugs.



↑ Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
2	HM-3320	\$4.85	\$4.30	\$3.75

AUTOMATIC ACCOUNT

For Schools, Government Depts, Public Companies, Radio & TV Stations

IDC

IDC HEADERS

All headers have gold plated pins.

VERTICAL

NEW
LOW
PRICE

Dimensions (mm)	Pins	A	B	C
Cat. PP-1100	10	20	18	10
Cat. PP-1106	16	28	26	18
Cat. PP-1110	26	41	38.5	30.5
Cat. PP-1112	34	51	49.5	41
Cat. PP-1114	40	58.5	56	48
Cat. PP-1116	50	71	69	61

↑ Pins	Cat.	Qty 1+	Qty 4+	Qty 10+
10	PP-1100	\$0.95	\$0.85	\$0.75
16	PP-1106	\$1.25	\$1.10	\$0.97
26	PP-1110	\$1.65	\$1.45	\$1.30
34	PP-1112	\$1.95	\$1.75	\$1.55
40	PP-1114	\$2.25	\$1.95	\$1.80
50	PP-1116	\$0.95		

RIGHT ANGLE

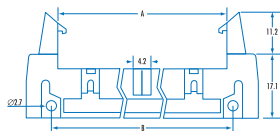
Dimensions (mm)	Pins	A	B	C
Cat. PP-1118	10	20	18	10
Cat. PP-1122	16	28	26	18
Cat. PP-1126	26	41	38.5	30.5
Cat. PP-1128	34	51	49.5	41
Cat. PP-1132	50	71	69	61

↑ Pins	Cat.	Qty 1+	Qty 4+	Qty 10+
10	PP-1118	\$1.25	\$1.10	\$0.97
16	PP-1122	\$1.45	\$1.30	\$1.15
26	PP-1126	\$1.75	\$1.55	\$1.40
34	PP-1128	\$2.25	\$1.95	\$1.80
50	PP-1132	\$2.95	\$2.60	\$2.30

IDC LOCKING HEADERS

All headers have gold plated pins.

VERTICAL



Dimensions (mm)	Pins	A	B	C	D
Cat. PP-1134	10	32	10	22	18
Cat. PP-1138	16	39.5	18	29.5	25.5
Cat. PP-1140	20	45	23	34.5	31
Cat. PP-1142	26	52	30.5	42	38
Cat. PP-1148	50	83	61	73	69

↑ Pins	Cat.	Qty 1+	Qty 4+	Qty 10+
10	PP-1134	\$1.25	\$1.10	\$0.97
16	PP-1138	\$1.65	\$1.45	\$1.30
20	PP-1140	\$1.95	\$1.75	\$1.55
26	PP-1142	\$2.25	\$1.95	\$1.80
50	PP-1148	\$3.75	\$3.30	\$2.95

RIGHT ANGLE

Dimensions (mm)	Pins	A	B	C	D
Cat. PP-1150	10	32	10	22	18
Cat. PP-1154	16	39.5	18	29.5	25.5
Cat. PP-1158	26	52	30.5	42	38
Cat. PP-1164	50	83	61	73	69

NEW
LOW
PRICE

↑ Pins	Cat.	Qty 1+	Qty 4+	Qty 10+
10	PP-1150	\$1.45	\$1.30	\$1.15
16	PP-1154	\$1.75	\$1.55	\$1.40
26	PP-1158	\$0.95		
50	PP-1164	\$0.95		

IDC LINE SOCKETS

- Insulation displacement connection
- Suits standard pitch ribbon cable

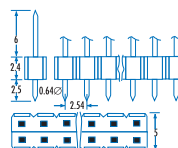


↑ Pins	Cat.	Qty 1+	Qty 10+	Qty 50+
10	PS-0984	\$1.65	\$1.45	\$1.30
16	PS-0985	\$1.85	\$1.65	\$1.45
20	PS-0986	\$1.95	\$1.75	\$1.55
26	PS-0987	\$2.25	\$1.95	\$1.80
34	PS-0988	\$2.65	\$2.30	\$2.07
40	PS-0989	\$2.95	\$2.60	\$2.30
50	PS-0990	\$3.45	\$3.05	\$2.75

DUAL IN-LINE

JUMPERS

- 40 way (2 x 20)
- Snap apart.

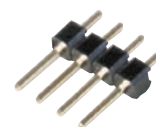
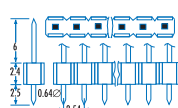


↑ Pins	Cat.	Qty 1+	Qty 4+	Qty 10+
40	HM-3250	\$1.75	\$1.55	\$1.40

HEADER TERMINAL

STRIPS 28 & 40 PIN

VERTICAL LAUNCHER -
0.1" / 2.54mm Pitch
For PCBs and PCB mass terminals.
Snap apart if you need a small length.



Pins	Cat.	Qty 1+	Qty 4+	Qty 10+
28	HM-3211	\$0.85	\$0.75	\$0.65
40	HM-3212	\$0.95	\$0.85	\$0.75

JUMPER SHUNTS

2.54mm spacing. Pkt 10



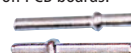
↑ Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
10	HM-3240	\$1.85	\$1.65	\$1.45

PCB PINS & SOCKETS

PCB PINS & SOCKETS

0.9mm pins and sockets for easy termination of wire on PCB boards.

- Gold flashed.



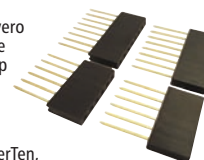
↑ Pkt	Cat.	Qty 1+	Qty 4+	Qty 10+
Pins 50	HP-1250	\$4.50	\$3.95	\$3.60
Sockets 25	HP-1260	\$5.50	\$4.90	\$4.30

ARDUINO HEADERS

STACKABLE HEADER SET FOR ARDUINO

The perfect accessory to the ProtoShield Basic, Pro, and vero type boards when connecting to your Arduino compatible project. Stackable headers have female sockets on the top side and male pins underneath, allowing you to conveniently stack boards and shields up in your project.

- Gold flash 0.1" pitch quality stackable headers
- 2 x 8 pin and 2 x 6 pin included to suit the Eleven, EtherTen, USBdroid and ProtoShields



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HM-3207	\$3.50	\$3.15	\$2.75

LET'S FIND EVERYTHING YOU NEED!

FROM
\$109.00
QM-3548



MAGNIFIERS

P144

FROM
\$16.95
TH-1760



TWEEZERS

P141

FROM
\$19.95
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PCB HOLDERS

P177

FROM
\$12.95
TH-1867



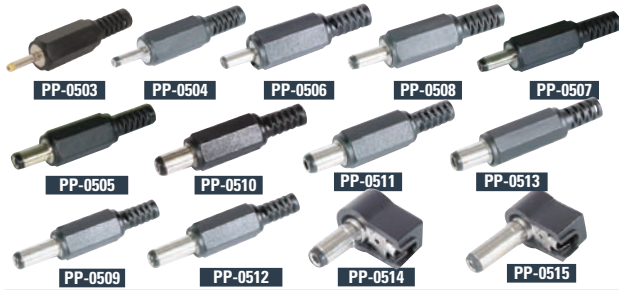
MAGNETIC WORKMAT

P138

DC POWER

LINE PLUGS

LINE - FEMALE Plastic Body



↑	9.5mm Shaft Length	Cat.	Qty 1+	Qty 10+	Qty 50+
	0.7(ID) x 2.5(OD)mm	PP-0503	\$1.95	\$1.75	\$1.55
	1.0(ID) x 3.8(OD)mm	PP-0504	\$1.95	\$1.75	\$1.55
	1.3(ID) x 3.5(OD)mm	PP-0506	\$1.95	\$1.75	\$1.55
	1.6(ID) x 5.2(OD)mm	PP-0508	\$1.95	\$1.75	\$1.55
	1.7(ID) x 4.0(OD)mm	PP-0507	\$1.95	\$1.75	\$1.55
	1.7(ID) x 4.75(OD)mm	PP-0505	\$1.95	\$1.75	\$1.55
	2.1(ID) x 5.5(OD)mm	PP-0510	\$1.95	\$1.75	\$1.55
↑	10mm Shaft Length	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.5(ID) x 5.5(OD)mm	PP-0511	\$1.95	\$1.75	\$1.55
	3.1(ID) x 6.3(OD)mm	PP-0513	\$1.95	\$1.75	\$1.55
↑	14mm Shaft Length	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.1(ID) x 5.5(OD)mm	PP-0509	\$1.95	\$1.75	\$1.55
	2.5(ID) x 5.5(OD)mm	PP-0512	\$1.95	\$1.75	\$1.55
↑	Right Angle 9.5mm Shaft Length	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.1(ID) x 5.5(OD)mm	PP-0514	\$2.65	\$2.30	\$2.07
↑	Right Angle - 14mm Shaft Length	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.5(ID) x 5.5(OD)mm	PP-0515	\$2.65	\$2.30	\$2.07

METAL BODY LINE - FEMALE

9.5mm shaft.



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.1(ID) x 5.5(OD)mm	PP-0531	\$3.75	\$3.30	\$2.95
	2.5(ID) x 5.5(OD)mm	PP-0532	\$3.75	\$3.30	\$2.95

2.1MM DC CONNECTORS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Plug - Screw Terminals	PA-3711	\$4.95	\$4.45	\$4.00
	Socket - Screw Terminals	PA-3713	\$4.95	\$4.45	\$4.00

ILLUMINATED POLARITY SENSING DC CONNECTORS

Simplifies installation of your CCTV cameras and other security applications. They detect and indicate the polarity of your power connections with integrated LEDs. The LED lights up either blue for centre positive, red for centre negative or purple for AC voltage. They also shine brighter as voltage increases. 5-30 VAC/VDC range, 1 metre lead length.



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	Inline Plug	WQ-7288	\$5.95	\$5.25	\$4.95
	Inline Socket	WQ-7289	\$5.95	\$5.25	\$4.95

WATERPROOF 2.1MM DC CONNECTORS WITH PIGTAIL LEADS

This is the same connector set fitted to our waterproof flexible LED strip lights, which features a standard 2.1(ID) x 5.5(OD)mm DC connection with an IP67 rated coupling. The connectors are supplied pre-fitted to a 100mm pigtail lead, allowing you to make up your own lead set. Very handy on the campsite or in any number of applications.

- Cables are 20AWG
- 3A max at 12VDC



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Waterproof	PS-0785	\$7.95	\$7.15	\$6.25

LINE SOCKETS

LINE - MALE

Plastic body



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.1mm	PS-0526	\$3.45	\$3.05	\$2.75
	2.5mm	PS-0528	\$3.45	\$3.05	\$2.75
	1.0mm - Suits Nokia	PS-0540	\$2.45	\$2.15	\$1.95

LINE SOCKETS

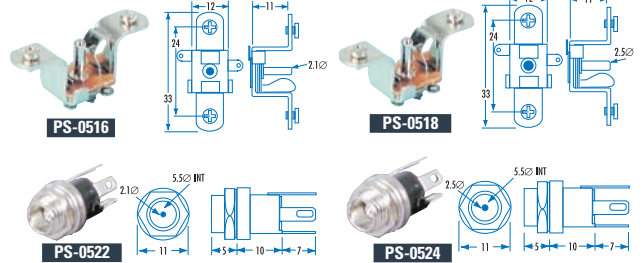
LINE - MALE

Metal Body



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.1mm	PS-0534	\$3.95	\$3.45	\$3.15
	2.5mm	PS-0536	\$3.95	\$3.45	\$3.15

CHASSIS MOUNT



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.1mm Chassis	PS-0516	\$1.95	\$1.75	\$1.55
	2.5mm Chassis	PS-0518	\$1.95	\$1.75	\$1.55
	2.1mm Bulkhead	PS-0522	\$2.95	\$2.60	\$2.30
	2.5mm Bulkhead	PS-0524	\$2.95	\$2.60	\$2.30

SURFACE MOUNT

2.5MM PC MOUNT MALE

SPST contacts.



1.6MM SWITCHED DC CHASSIS MALE



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.5mm	PS-0520	\$1.95	\$1.75	\$1.55
	1.6mm Switched - Pack of 10	PS-0530	\$4.95		

0.7MM PCB MOUNT DC SOCKET WITH SPST SLIDE SWITCH

- Snap-in, PCB mounted 0.7mm DC power socket with SPST black On/Off slide switch.
- Electrical rating: 2A @ 15VDC
- Contact resistance: <30m ohm (max)
- Insulation resistance: 100M ohm (min)
- Electrical life: 30,000 cycles
- Dimensions: 15(L) x 10(W) x 14.6(D)mm



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
		PS-0532	\$5.95	\$5.50	\$4.75

2.1MM PCB MOUNT DC SOCKET WITH SPST ROCKER SWITCH

- Snap-in, PCB mounted 2.1mm DC power socket with SPST black rocker switch.
- Electrical rating: 5A @ 15VDC
- Contact resistance: <20m ohm (initial)
- Insulation resistance: 1000M ohm (500VDC between open contacts)
- Dielectric strength: >1500V 1 minute
- Electrical life: 6,000 cycles
- Overall dimensions: 24.5(L) x 9.0(W) x 14.1(D)mm



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
		PS-0531	\$5.95	\$5.50	\$4.75

DC POWER ADAPTORS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	2.1mm to 2.1mm Plug	PA-3707	\$2.95	\$2.60	\$2.30
	2.1mm to 2.1mm Socket	PA-3701	\$3.45	\$3.05	\$2.75

DC POWER ADAPTORS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	1.3mm DC Plug to 2.5mm DC Socket	PA-3700	\$2.95	\$2.60	\$2.30
	1.3mm DC Plug to 2.1mm DC Socket	PA-3702	\$2.95	\$2.60	\$2.30
	2.1mm DC Plug to 2.5mm DC Socket	PA-3704	\$2.95	\$2.60	\$2.30
	2.5mm DC Plug to 2.1mm DC Socket	PA-3706	\$2.95	\$2.60	\$2.30

BANANA

TECH TALK!

Banana plugs & sockets originally started life on test equipment. Their versatility quickly saw them as output connectors for power supplies. When they were integrated with binding posts they quickly saw use as speaker connectors. Now they are everywhere.

BANANA PLUGS

PLUGS - PIGGY BACK

With this quality piggy back style, another banana plug can be inserted into the back of the plug.



PP-0390 PP-0391 PP-0381 PP-0382 PP-0383

↑ Piggy Back	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PP-0390	\$1.95	\$1.75	\$1.55
Black	PP-0391	\$1.95	\$1.75	\$1.55
Green	PP-0381	\$1.95	\$1.75	\$1.55
Blue	PP-0382	\$1.95	\$1.75	\$1.55
Yellow	PP-0383	\$1.95	\$1.75	\$1.55

Piggy back insulating shroud type. Works with our PS-0420-24 series.



PP-0385 PP-0386 PP-0387 PP-0388 PP-0389

↑ Piggy Back	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PP-0385	\$2.45	\$2.15	\$1.95
Black	PP-0386	\$2.45	\$2.15	\$1.95
Green	PP-0387	\$2.45	\$2.15	\$1.95
Blue	PP-0388	\$2.45	\$2.15	\$1.95
Orange	PP-0389	\$2.45	\$2.15	\$1.95

PLUGS



PP-0400/02

PP-0394/95

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Red - 4mm	PP-0400	\$0.95	\$0.85	\$0.75
Black - 4mm	PP-0402	\$0.95	\$0.85	\$0.75
Red - Right Angle	PP-0394	\$2.25	\$1.95	\$1.80
Black - Right Angle	PP-0395	\$2.25	\$1.95	\$1.80

PLUGS - METAL GOLD PLATED

Designed for monster type speaker cable.

- Side entry hole, with finger screw locking action.
- Hole will accept another banana plug or thick cable.

PLUGS - METAL GOLD PLATED & LOCKING

These lock into the socket, and cannot be easily removed.

- Gold plated



PP-0416

PP-0417

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PP-0426	\$4.95	\$4.45	\$3.90
Black	PP-0427	\$4.95	\$4.45	\$3.90
Red - Locking	PP-0416	\$7.95	\$6.95	\$6.25
Black - Locking	PP-0417	\$7.95	\$6.95	\$6.25

4MM BANANA SOCKET TO ALLIGATOR CLIP

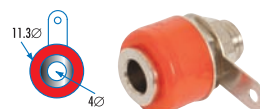


PA-3668

PA-3669

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PA-3668	\$2.75	\$2.45	\$2.15
Black	PA-3669	\$2.75	\$2.45	\$2.15

BANANA CHASSIS SOCKETS



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Red - 4mm	PS-0406	\$0.65	\$0.57	\$0.50
Black - 4mm	PS-0408	\$0.65	\$0.57	\$0.50

FULLY INSULATED

Works with our PP-0385-89 series.



↑ Fully Insulated	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PS-0420	\$2.25	\$1.95	\$1.80
Black	PS-0421	\$2.25	\$1.95	\$1.80
Green	PS-0422	\$2.25	\$1.95	\$1.80
Blue	PS-0423	\$2.25	\$1.95	\$1.80
Yellow	PS-0424	\$2.25	\$1.95	\$1.80

Includes a plastic cover to reduce the risk of shorting. Grub screws for internal wire connection. Hole size is 12mm. Cable hole 5mm dia. Available in red or black.

- Gold plated



PP-0436

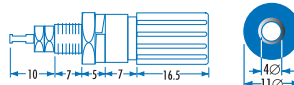
PP-0437

↑ Fully Insulated Gold	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PP-0436	\$5.95	\$5.25	\$4.75
Black	PP-0437	\$5.95	\$5.25	\$4.75

BINDING POSTS

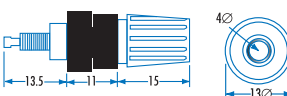
STANDARD

Incorporates a banana socket.



PREMIUM

Super quality with metal thread.



DUAL

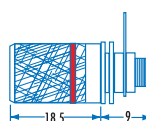
- Insulated cable entry.
- Post spacing 19mm.



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Blue Standard	PT-0450	\$1.65	\$1.45	\$1.30
Yellow Standard	PT-0451	\$1.65	\$1.45	\$1.30
White Standard	PT-0452	\$1.65	\$1.45	\$1.30
Red Standard	PT-0453	\$1.65	\$1.45	\$1.30
Black Standard	PT-0454	\$1.65	\$1.45	\$1.30
Green Standard	PT-0455	\$1.65	\$1.45	\$1.30
Red Premium	PT-0460	\$1.95	\$1.75	\$1.55
Black Premium	PT-0461	\$1.95	\$1.75	\$1.55
Green Premium	PT-0462	\$1.95	\$1.75	\$1.55
Dual	PT-0457	\$6.95	\$6.25	\$5.50

BANANA SOCKETS / BINDING POSTS - METAL

Will accept a banana plug in the end and monster type cable or banana plug in the side. Designed for mounting on the back of amplifiers as mounting thread is only 6mm long

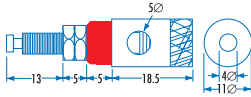


↑ Amplifier Mount	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PT-0430	\$4.95	\$4.45	\$3.90
Black	PT-0431	\$4.95	\$4.45	\$3.90

BANANA (CONTINUED)

SPEAKER BOX MOUNT

These have a hole entry on the side which will accept monster type speaker cable or a banana plug. Thread is 19mm long.

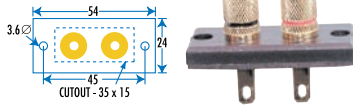


↑ Speaker Box Mount	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PP-0434	\$4.95	\$4.45	\$3.90
Black	PP-0435	\$4.95	\$4.45	\$3.90

BANANA / SCREW TYPE

2 Way Gold Terminals
Top quality speaker terminal with gold banana sockets which also have a huge hole (6mm) to accept Monster type speaker cable.

- Supplied with gasket.
- Dimensions: 54(W) x 24(H)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	PT-3008	\$9.95	\$8.75	\$7.75

BANANA SOCKET WALLPLATES

- Standard power point size.
- Red & black



PS-0412 PS-0414

↑ Socket	Cat.	Qty 1+	Qty 2+	Qty 5+
2 Way	PS-0412	\$6.95	\$6.25	\$5.50
4 Way	PS-0414	\$8.95	\$7.95	\$6.95

BANANA SOCKET / BINDING POST WALLPLATES

- Standard power point size.
- Gold plated



PT-0470

PT-0472

PT-0474

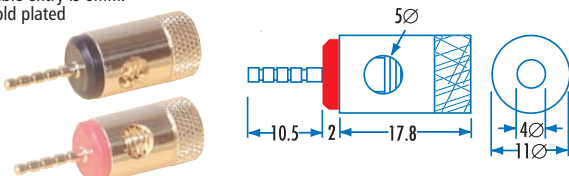
↑ Socket / Binding Post	Cat.	Qty 1+	Qty 2+	Qty 5+
2 Way	PT-0470	\$11.95	\$10.70	\$9.50
4 Way	PT-0472	\$17.95	\$15.95	\$14.35
8 Way	PT-0474	\$24.95	\$22.35	\$19.70

SPEAKER PUSH/SCREW TERMINALS

JUMBO SPEAKER CABLE TERMINALS

Can't fit your large speaker cable into your speaker box spring terminals? Problem solved!! Simply terminate the thick cable into these gold connectors and the 1.5mm dia. pin easily fits into speaker rear terminals.

- Cable entry is 6mm.
- Gold plated

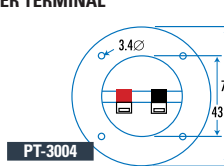


Type	Cat.	Qty 1+	Qty 5+	Qty 10+
Red	PT-3020	\$2.65	\$2.30	\$2.07
Black	PT-3021	\$2.65	\$2.30	\$2.07

LARGE ROUND SPEAKER TERMINAL

Up to 16 AWG cable.

- Cutout 50mm.

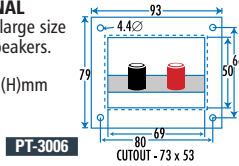


PT-3004

SPEAKER BOX TERMINAL

Ideal if you are running large size speaker cable to your speakers.

- Dimensions 92(W)x79(H)mm

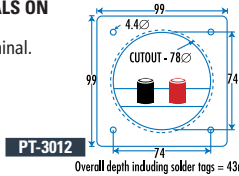


PT-3006

2 WAY GOLD TERMINALS ON A PLATE

Top quality speaker terminal.

- Plate size 99 x 99mm.
- Hole cutout is round - diameter 76mm.

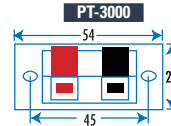


PT-3012

2 WAY - UP TO 16AWG

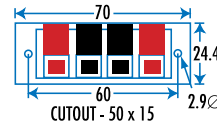
Up to 16AWG cable.

- Mounting holes: 45mm apart
- Dimensions: 54(L) x 24(W)mm



PT-3000

4 WAY - UP TO 16AWG



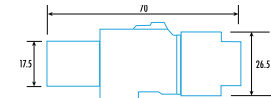
PT-3002

↑ Type	Cat.	Qty 1+	Qty 5+	Qty 10+
2 Way Round	PT-3004	\$2.95	\$2.60	\$2.30
Speaker Box	PT-3006	\$6.95	\$6.25	\$5.50
2 Way Gold / Plate	PT-3012	\$11.95	\$10.70	\$9.50
2 Way	PT-3000	\$1.75	\$1.55	\$1.40
4 Way	PT-3002	\$2.95	\$2.60	\$2.30

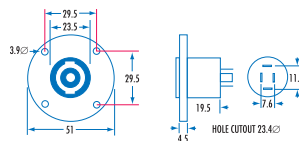
AUDIO - ECONOMY RANGE



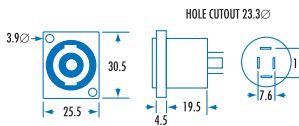
PP-1080



PS-1084



PS-1082



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Inline Speaker 4 Pole Connector	PP-1080	\$12.95	\$11.35	\$10.35
Round Soaker Bin Socket	PS-1084	\$9.95	\$8.75	\$7.75
Square Speaker Chassis Socket	PS-1082	\$9.95	\$8.75	\$7.75

AUDIO - ECONOMY RANGE (CONTINUED)

SPEAKON LEAD EXTENDER

Connects Speakon leads together to extend cable runs as far as you need to.

- ABS construction.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-3689	\$12.95	\$11.35	\$10.35

SPEAKON AUDIO LEADS

Speakon connectors are the standard for speaker connections in PA and sound reinforcement applications, and if you're building or installing a system they're the only way to go. You could buy the cable and connectors and put them together, or buy these excellent ready-made cable assemblies. Available in lengths up to 20m for every application



NEW
LOW
PRICE

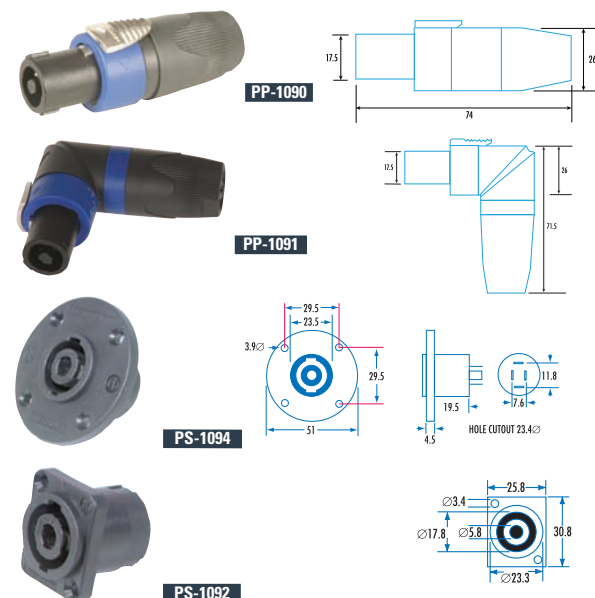
↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	5 metre	WA-7100	\$24.95	\$22.35	\$19.70
	10 metre	WA-7102	\$44.95	\$40.45	\$35.90
	20 metre	WA-7106	\$69.95		

"SPEAKON" LOUDSPEAKER

NEUTRIK

Heavy duty, fail-safe speaker connectors

- 4 pole with Locking ring
- 30 amp continuous current
- Solderless termination
- The standard in high power PA speaker connections
- PS-1094 & PS-1092 hole cutout 24mm



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Inline Speaker Connector 4 Pole	PP-1090	\$14.95	\$13.35	\$11.70
	Inline Speaker Plug	PP-1091	\$19.95	\$17.70	\$15.70
	Round Speaker Bin Chassis Mount Plastic	PS-1094	\$11.95	\$10.70	\$9.50
	Square Chassis Mount Plastic	PS-1092	\$11.95	\$10.70	\$9.50

TECH TALK!

XLR WIRING

The Standard is defined by the Audio Engineering Society in AES14-1992(r1998)

Pin 1: Shield/Ground Pin 2: Hot/in Phase / +

Pin 3: Cold / Out of Phase / -

To create an unbalanced connection, pin 1 & pin 3 are connected to ground & pin 2 carries the signal.

Note that there is a lot of equipment (particularly in the US) that has pin 2 & pin 3 designations reversed (i.e. 3 hot, 2 cold). Manufacturers are adopting the Standard on all new equipment.



MALE



FEMALE

As seen from front of connectors

MINI XLR

3, 4 PIN LINE

- Diecast body
- Nickel plated

SCANAR

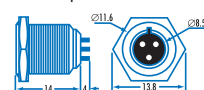


↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	3 Pin - Male	PP-1910	\$5.95	\$5.25	\$4.75
	3 Pin - Female	PS-1924	\$6.95	\$6.25	\$5.50
	4 Pin - Male	PP-1912	\$6.95	\$6.25	\$5.50
	4 Pin - Female	PS-1926	\$6.95	\$6.25	\$5.50

3, 4 PIN CHASSIS

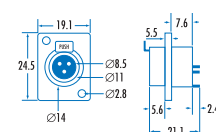
3 PIN MALE

- Diecast body
- Nickel plated



3 PIN FEMALE

Cut out 15mm.



4 PIN FEMALE

Cut out 15mm

SCANAR



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	3 Pin - Male	PP-1916	\$7.95	\$6.95	\$6.25
	3 Pin - Female	PS-1930	\$9.95	\$8.75	\$7.75
	4 Pin - Male	PP-1918	\$7.95	\$6.95	\$6.25
	4 Pin - Female	PS-1932	\$9.95	\$8.75	\$7.75

WALLPLATES STAINLESS STEEL

No matter what audio installation you're contemplating, you're sure to find a wallplate to give your room that pro look. Finished in attractive stainless steel, these cost-effective wallplates have all the popular audio connectors, or use a blank to customise your own. Ideal for Hi-Fi installations, home studios, home theatre or just a neat solution to running an AV extension to another room.

BLANK WALLPLATE

Stainless steel blank wallplate

+ WANT MORE
WALLPLATES SEE
PAGE 408



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 5+
	Blank	PS-0550	\$3.95	\$3.45	\$3.15

XLR - BLANK

Pre-punched blanks for XLR sockets.

- Sockets not included



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 5+
	Single Blank	PS-0551	\$4.50	\$3.95	\$3.60
	Double Blank	PS-0552	\$4.95	\$4.45	\$3.90

XLR - LOADED

Pre-punched wallplate with loaded XLR socket(s).



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 5+
	Single 3 pin Female XLRs	PS-0553	\$6.95	\$6.25	\$5.50
	Double 3 pin Female XLRs	PS-0554	\$9.95	\$8.75	\$7.75

XLR - AMPHENOL

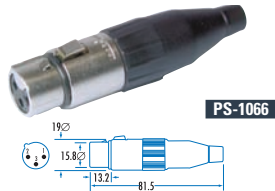
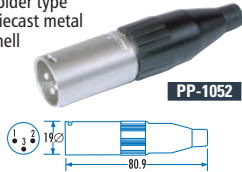
TECH TALK!

Typically used for balanced connections such as professional microphones; these connectors are 3 pin and lock on to the socket. The confusion over whether pin 2 or 3 is hot has only relatively recently been resolved. The Standard has been defined by the Audio Engineering Society which we have outlined on the bottom of page 191.

Amphenol® have taken over the genuine Cannon brand.

LINE - 3 PIN

- Solder type
- Diecast metal shell



LINE - 3 PIN IDC

- Diecast metal shell
- Insulation displacement (solderless)



LINE - 4 PIN

Cannon/Amphenol Silver

- Diecast metal shell
- Nickel plated



Type	Cat.	Qty 1+	Qty 10+	Qty 50+
3 Pin - Male	PP-1052	\$6.95	\$6.25	\$5.50
3 Pin - Female	PS-1062	\$7.95	\$6.95	\$6.25
3 Pin Solderless - Male	PP-1056	\$7.95	\$6.95	\$6.25
3 Pin Solderless - Female	PS-1066	\$9.95	\$8.75	\$7.75
4 Pin - Male	PP-1040	\$11.95	\$10.70	\$9.50
4 Pin - Female	PS-1042	\$15.95	\$14.35	\$12.70

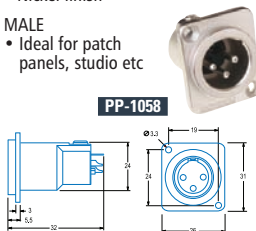
CHASSIS MOUNT D-SERIES XLR SOCKETS

High quality Amphenol brand XLR 3 pole chassis mount sockets. Can be front or rear mounted in P or D series panels.

- 24mm hole cut-out
- D series flange
- Stamped phosphor
- Bronze contacts
- Nickel finish
- Max Wire Gauge: 14AWG
- Flammability Rating: UL94-V0
- Current Carrying Capacity: 15A
- RoHS Compliant.

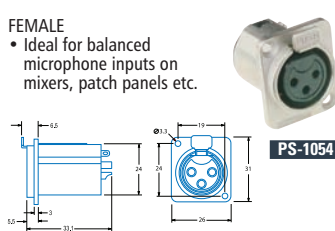
MALE

- Ideal for patch panels, studio etc



FEMALE

- Ideal for balanced microphone inputs on mixers, patch panels etc.



Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Male	PP-1058	\$6.95	\$6.25	\$5.50
Female	PS-1054	\$7.95	\$6.95	\$6.25

CANNON / XLR TYPE

3 PIN LINE



Type	Cat.	Qty 1+	Qty 10+	Qty 50+
3 Pin Black - Male	PP-1012	\$4.50	\$3.95	\$3.60
3 Pin Black - Female	PS-1015	\$4.95	\$4.45	\$3.90
3 Pin R/A Black - Male	PP-1020	\$9.95	\$8.75	\$7.75
3 Pin R/A Black - Female	PS-1022	\$9.95	\$8.75	\$7.75

WATERPROOF IP67 XLR LINE CONNECTORS

A matching IP67 waterproof plug and socket suitable for harsh environments. Great for use with PA gear and cabling that are used in outdoor conditions.

LINE PLUG

PP-1013



LINE SOCKET

PS-1017



	Cat.	Qty 1+	Qty 10+	Qty 50+
3 Pin Black - Male IP67	PP-1013	\$9.95	\$8.75	\$7.75
3 Pin Black - Female IP67	PS-1017	\$9.95	\$8.75	\$7.75

COMBO XLR / 6.35MM STEREO SOCKET SWITCHED

Combined 3 pole XLR & 6.35mm stereo jack for balanced microphone or line. It will accept 6.35mm mono, 6.35mm stereo or 3-pin male XLR.

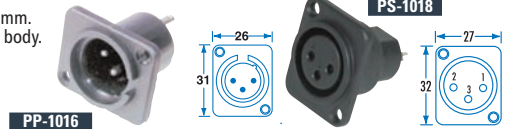
- Suits D-series panel cut-outs.
- Non-locking.
- Panel or PCB mounting
- Switched
- Independent inputs
- Gold plated contacts



	Qty 1+	Qty 10+	Qty 50+
PS-1069	\$9.95	\$8.75	\$7.75

3 PIN CHASSIS - PLASTIC

- Hole cutout 22mm.
- Black ABS plastic body.

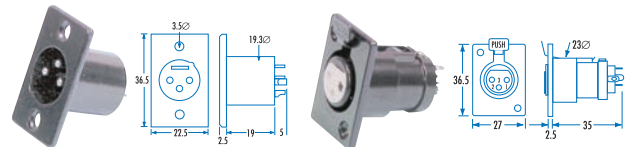


Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Plastic - Male	PP-1016	\$3.95	\$3.45	\$3.15
Plastic - Female	PS-1018	\$3.95	\$3.45	\$3.15

3 PIN CHASSIS - METAL

- Hole cutout 20mm. Black. Diecast body

SOANAR

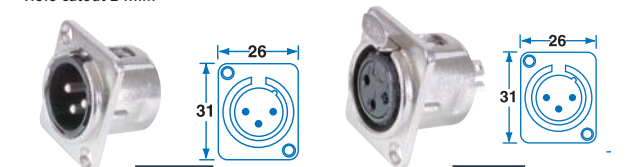


Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Metal - Male - Hole cutout 20mm	PP-1010	\$4.50	\$3.95	\$3.60
Metal - Female - Hole cutout 24mm	PS-1014	\$6.50	\$5.75	\$4.95

CHASSIS METAL

- Small size, diecast body, nickel plated
- Hole cutout 24mm

SOANAR



Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Small Size Metal - Male	PP-1023	\$5.95	\$5.25	\$4.75
Small Size Metal - Female	PS-1024	\$6.95	\$6.25	\$5.50

RUBBER XLR COVER BOOT

This cover will mean you can effectively operate a PA or sound system outdoors in inclement weather without undue damage. This flexible boot slips over the entire XLR - XLR connection to keep water and dust out. Even if you aren't planning to use your system in the rain, they're still indispensable for protecting permanent connections from damage and dust.

- 120mm long.



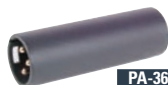
	Qty 1+	Qty 10+	Qty 50+
PM-1034	\$1.65	\$1.45	\$1.30

MULTI-PIN AUDIO & POWER CONNECTORS

CANNON / XLR TYPE (CONTINUED)

XLR ADAPTORS

3 PIN ADAPTORS



PA-3684



PA-3686

↑ Type	Cat.	Qty 1+	Qty 4+	Qty 10+
Male	PA-3684	\$12.95	\$11.35	\$10.35
Female	PA-3686	\$14.95	\$13.35	\$11.70

3 PIN CANNON TYPE SOCKET TO 6.5MM PLUG ADAPTOR

These are high quality, all metal construction adaptors suitable for stage or studio use. They're ideal for converting microphone cannon leads to 6.5mm plugs ready for 4-track recorders or any other audio equipment with 6.5mm sockets



PA-3682



PA-3680

↑ Type	Cat.	Qty 1+	Qty 4+	Qty 10+
Male	PA-3682	\$12.95	\$11.35	\$10.35
Female	PA-3680	\$8.95	\$7.95	\$6.95

XLR TO RCA ADAPTOR



PA-3800



PA-3802

↑ Type	Cat.	Qty 1+	Qty 4+	Qty 10+
Male	PA-3800	\$9.95	\$8.75	\$7.75
Female	PA-3802	\$12.95	\$11.35	\$10.35

MICROPHONE SERIES

MICROPHONE LINE FEMALE

- Solid metal machined body
- Nickel plated
- Also suitable for secure, low voltage DC connection
- 10A max 32VDC



PS-2014



PS-2012



PS-2018

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Pin	PS-2014	\$2.95	\$2.60	\$2.30
4 Pin	PS-2012	\$2.95	\$2.60	\$2.30
5 Pin	PS-2018	\$3.45	\$3.05	\$2.75

MICROPHONE CHASSIS MALE

- Solid metal machined body
- Nickel plated
- 10A max 32VDC



PP-2013



PP-2017



PP-2010

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Pin	PP-2013	\$2.95	\$2.60	\$2.30
4 Pin	PP-2010	\$2.95	\$2.60	\$2.30
5 Pin	PP-2017	\$3.45	\$3.05	\$2.75

M8 CIRCULAR

Commonly used in process control instrumentation. All connectors are field installable.

NEW
LOW
PRICE



PP-4300



PS-4301

↑ Type	Cat.	Qty 1+
3 Way Plug	PP-4300	\$4.95
4 Way Plug	PP-4302	\$4.95
3 Way Socket	PS-4301	\$4.95
4 Way Socket	PS-4303	\$4.95

HARSH ENVIRONMENT

IP67 RATED MULTIPLE POLE HARSH ENVIRONMENT CONNECTORS

C16-1 series connectors offer 3 or 6 pole with pre-engaging earth contact. The mating parts screw together securely to provide environmental protection to IP67.



PP-1000



PS-1001



PP-1006



PS-1007



PS-1009



PP-1004



Specifications	3 Pole + PE*	6 Pole + PE*
Current rating	16A	10A
Voltage rating	380VAC 450VDC	380VAC 450VDC
Insulation resistance	> 10Gohms	> 10Gohms
Contact resistance	< 5mohms	< 5mohms
Max wire size	2.5mm ²	0.75mm ²
Environmental		
Temperature range	-40°C to +100°C	
Protection	IP67 to IEC60529/ DIN40050	
Housing	Polyamide 66 Nylon	
Strain relief	Screw clamp & Gland Nut	

Note:
*Means Pre-Engaging

6 POLE

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
PE Line Plug	PP-1000	\$19.95	\$17.70	\$15.70
PE Line Socket	PS-1001	\$19.95	\$17.70	\$15.70
PE Chassis Plug	PP-1002	\$13.95	\$12.35	\$10.95
PE Chassis Socket	PS-1003	\$13.95	\$12.35	\$10.95

3 POLE

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
PE Line Plug	PP-1006	\$17.95	\$15.95	\$14.35
PE Line Socket	PS-1007	\$17.95	\$15.95	\$14.35
PE Chassis Plug	PP-1008	\$12.95	\$11.35	\$10.35
PE Chassis Socket	PS-1009	\$12.95	\$11.35	\$10.35

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Plug Dust Cap	PP-1004	\$9.95	\$8.75	\$7.75
Socket Dust Cap	PS-1005	\$9.95	\$8.75	\$7.75

LTW IP67 HARSH ENVIRONMENT CIRCULAR CONNECTORS

Perfect for harsh environments such as marine, industrial, outdoor, automotive, etc.

- IP67 rated
- Locking bayonet connection
- Gold plated
- UL rated
- Wide temperature: -40°C to 105°C
- Solder pins
- 2pin versions rated to 5A
- 4 and 6 pin versions rated to 2A

LTW®



PS-0541



PP-0542



PS-0543



PP-0544



PS-0545



PP-0546



PS-0547

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Pin Line Socket	PS-0541	\$11.95	\$10.70	\$9.50
2 Pin Panel Mount Plug	PP-0542	\$8.95	\$7.95	\$6.95
4 Pin Line Socket	PS-0543	\$13.95	\$12.35	\$10.95
4 Pin Panel Mount Plug	PP-0544	\$10.95	\$9.75	\$8.75
6 Pin Line Socket	PS-0545	\$14.95	\$13.35	\$11.70
6 Pin Panel Mount Plug	PP-0546	\$12.95	\$11.35	\$10.35
Dust Cap to suit PP-0544 & PP-0546	PS-0547	\$6.95	\$6.25	\$5.50

DIN

TECH TALK!

Originally a German standard, these connectors are available in versions from 2 to 13 pins. Once widely used, these are now seen less on AV equipment. The 2 pin version is used for some loudspeakers and 5 pin version is still used for connecting MIDI electronic musical instruments & older PC keyboards.

LINE DIN PLUGS



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Pin	PP-0300	\$0.65	\$0.57	\$0.50
3 Pin	PP-0302	\$0.95	\$0.85	\$0.75
5 Pin	PP-0304	\$1.00	\$0.90	\$0.80
5 Pin 240°	PP-0305	\$1.25	\$1.10	\$0.97
5 Pin Premium Die Cast	PP-0306	\$3.75	\$3.30	\$2.95
6 Pin	PP-0308	\$1.45	\$1.30	\$1.15
7 Pin	PP-0310	\$1.65	\$1.45	\$1.30
8 Pin	PP-0312	\$1.85	\$1.65	\$1.45

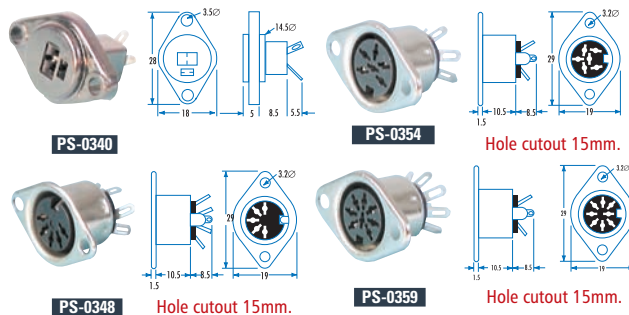
LINE SOCKETS - 5, 6, 8 PIN



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
5 Pin	PS-0352	\$1.85	\$1.65	\$1.45
6 Pin	PS-0355	\$2.45	\$2.15	\$1.95
8 Pin	PS-0358	\$2.95	\$2.60	\$2.30

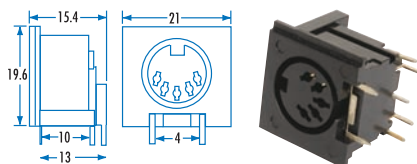
2, 5, 6, 8 PIN PANEL SOCKETS

• Nickel plated



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Pin	PS-0340	\$1.45	\$1.30	\$1.15
5 Pin	PS-0354	\$1.65	\$1.45	\$1.30
6 Pin	PS-0348	\$1.95	\$1.75	\$1.55
8 Pin	PS-0359	\$2.95	\$2.60	\$2.30

5 PIN RIGHT ANGLE PCB SOCKET



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
5 Pin Right Angle	PS-0350	\$1.95	\$1.75	\$1.55

MINI DIN

MINI DIN PLUGS



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
4 Pin - Nickel Plated	PP-0362	\$3.95	\$3.45	\$3.15
4 Pin - Nickel Plated	PP-0364	\$1.75	\$1.55	\$1.40
4 Pin - Gold Plated - 6mm	PP-0365	\$5.95	\$5.25	\$4.75
6 Pin - Nickel Plated	PP-0366	\$1.95	\$1.75	\$1.55
8 Pin - Nickel Plated	PP-0370	\$1.95	\$1.75	\$1.55

4, 6, 8 PIN LINE SOCKETS



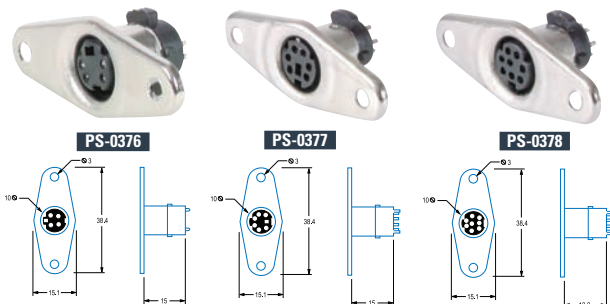
↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
4 Pin	PS-0372	\$1.95	\$1.75	\$1.55
6 Pin	PS-0368	\$2.25	\$1.95	\$1.80

MINI DIN / S-VIDEO

4, 6, 8 PIN PANEL SOCKETS

Cutout 10mm.
• Nickel plated

NEW
LOW
PRICE



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
4 Pin	PS-0376	\$2.75	\$2.45	\$2.15
6 Pin	PS-0377	\$2.75	\$2.45	\$2.15
8 Pin	PS-0378	\$0.95		

MINI DIN / S-VIDEO ADAPTORS



↑ Type	Cat.	Qty 1+	Qty 4+	Qty 10+
S-Video Plug to RCA Video Socket	PA-3577	\$8.95	\$7.95	\$6.95
S-Video to RCA Video	PA-3578	\$7.95	\$6.95	\$6.25
S-Video Joiner	PA-3573	\$9.95	\$8.75	\$7.75
6 Pin Mini DIN Adaptor	PA-0878	\$7.95	\$6.95	\$6.25

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here!
Check our website for over 3,500 pages of data!

MORE INFO
WEB

RCA CONNECTORS

RCA PLUGS

PLUGS - PLASTIC

Economy style.



Colour	Cat	Qty 1+	Qty 10+	Qty 50+
Blue	PP-0238	\$0.68	\$0.60	\$0.52
Green	PP-0239	\$0.68	\$0.60	\$0.52
Red	PP-0240	\$0.68	\$0.60	\$0.52
Black	PP-0242	\$0.68	\$0.60	\$0.52
Yellow	PP-0243	\$0.68	\$0.60	\$0.52
White	PP-0244	\$0.68	\$0.60	\$0.52

METAL BODY RCA PLUGS WITH CABLE PROTECTION SPRING



NICKEL	Cat	Qty 1+	Qty 10+	Qty 50+
	PP-0245	\$1.95	\$1.75	\$1.55
GOLD PLATED 7mm Cable	Cat	Qty 1+	Qty 10+	Qty 50+
Red	PP-0236	\$3.25	\$2.90	\$2.60
Black	PP-0237	\$3.25	\$2.90	\$2.60

PREMIUM GOLD PLATED METAL BODY RCA PLUGS



Colour	Cat	Qty 1+	Qty 10+	Qty 50+
Red	PP-0230	\$3.95	\$3.45	\$3.15
Black	PP-0232	\$3.95	\$3.45	\$3.15
Yellow	PP-0231	\$3.95	\$3.45	\$3.15
White	PP-0233	\$3.95	\$3.45	\$3.15
Blue	PP-0234	\$3.95	\$3.45	\$3.15
Green	PP-0235	\$3.95	\$3.45	\$3.15

COMPRESSION CRIMP RCA

For high end audio and video. Recommended for Pay TV, HDTV, Component and RGB.



NEW LOW PRICE

COMPRESSION CRIMP	Cat	Qty 1+	Qty 10+	Qty 50+
Red	PP-0200	\$2.95		
Yellow	PP-0204	\$4.50	\$3.95	\$3.60
Blue	PP-0201	\$2.95		

CRIMPLESS RG6 PLUGS

Crimpless and solderless. All metal construction, requiring no tools to fit.



NEW LOW PRICE

Colour	Cat	Qty 1+	Qty 10+	Qty 50+
Red	PP-0205	\$3.50	\$3.15	\$2.75
Yellow	PP-0206	\$3.50	\$3.15	\$2.75
White	PP-0207	\$3.50	\$3.15	\$2.75
Green	PP-0209	\$1.95		

STORE DETAILS

For store locations and opening hours see the back cover of this catalogue or download our "Store Locator App".



RCA SOCKETS

RCA PLUG WITH SPRING TERMINALS

Male RCA connector to spring terminal block. No tools required.



NEW 2015

	Cat.	Qty 1+	Qty 4+	Qty 10+
Plug	PA-3717	\$4.95	\$4.45	\$4.00
Socket	PA-3718	\$4.95	\$4.45	\$4.00

RCA LINE SOCKETS

RCA (PHONO) LINE SOCKETS

Plastic Economy style.



Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PS-0250	\$0.60	\$0.52	\$0.47
Black	PS-0252	\$0.60	\$0.52	\$0.47

METAL BODY RCA SOCKETS WITH CABLE PROTECTION SPRING



PS-0254



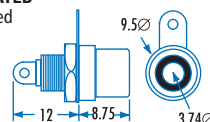
PS-0274

Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Nickel Plated	PS-0254	\$1.95	\$1.75	\$1.55
Gold Plated - Red	PS-0272	\$2.45	\$2.15	\$1.95
Gold Plated - Black	PS-0274	\$2.45	\$2.15	\$1.95

RCA CHASSIS SOCKETS

NICKEL PLATED

Non Insulated



PS-0256



PS-0257

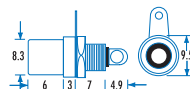


PS-0255

Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Nickel Plated - Black	PS-0256	\$0.95	\$0.85	\$0.75
Nickel Plated - Red	PS-0257	\$0.95	\$0.85	\$0.75
Nickel Plated - Yellow	PS-0255	\$0.95	\$0.85	\$0.75

RCA CHASSIS SOCKETS - GOLD

Non Insulated



Gold Plated	Cat.	Qty 1+	Qty 10+	Qty 50+
Black	PS-0258	\$1.95	\$1.75	\$1.55
Red	PS-0259	\$1.95	\$1.75	\$1.55
Yellow	PS-0260	\$1.95	\$1.75	\$1.55
White	PS-0261	\$1.95	\$1.75	\$1.55
Blue	PS-0270	\$1.95	\$1.75	\$1.55
Green	PS-0271	\$1.95	\$1.75	\$1.55

RCA SOCKET MOUNTING KIT

This kit allows you to mount and insulate RCA sockets in a metal panel. The RCA sockets suited are single hole types PS-0256/7 and PS-0258 gold.

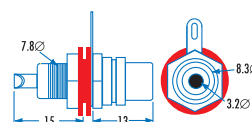
- Pkt 10 plastic grommets and fibre washers
- Essential where earth loop hum is a problem



	Cat.	Qty 1+	Qty 10+	Qty 50+
Mounting Kit - Pack of 10	HP-1180	\$4.95	\$4.45	\$3.90

RCA CHASSIS SOCKETS - GOLD

Requires 9.5mm dia panel hole



PS-0276



PS-0277

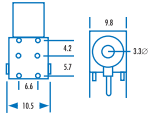
Gold Plated Ins	Cat.	Qty 1+	Qty 10+	Qty 50+
Black	PS-0276	\$3.95	\$3.45	\$3.15
Red	PS-0277	\$3.95	\$3.45	\$3.15
Yellow	PS-0275	\$3.95	\$3.45	\$3.15
White	PS-0278	\$3.95	\$3.45	\$3.15

RCA SOCKETS (CONTINUED)

RCA PCB SOCKETS

RCA RIGHT ANGLE SOCKET.

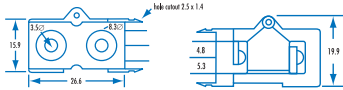
- Black insert only
- Nickel plated



PS-0279

DOUBLE SOCKET - GOLD

- White & red coloured inserts



PS-0280

Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Right Angle	PS-0279	\$1.45	\$1.30	\$1.15
Double Socket - Vertical	PS-0280	\$1.95	\$1.75	\$1.55

FOR A GREAT RANGE OF SCREENED AUDIO CABLE TO SUIT THESE PRODUCTS SEE PAGE 207.

RCA ADAPTORS

RCA SOCKET ADAPTORS



PA-3598



PA-3560



PA-3562



PA-3599



PA-3564



PA-3678



PA-3570

Type	Cat.	Qty 1+	Qty 4+	Qty 10+
RCA Female to RCA Female	PA-3598	\$2.95	\$2.60	\$2.30
RCA Plug to 2 x RCA Socket	PA-3560	\$3.95	\$3.45	\$3.15
1 x RCA Socket to 2 x RCA Socket	PA-3562	\$3.95	\$3.45	\$3.15
RCA Socket to RCA Socket	PA-3599	\$5.95	\$5.25	\$4.75
3 x RCA Socket to 3 x RCA Socket	PA-3564	\$7.95	\$6.95	\$6.25
RCA Socket to BNC Socket	PA-3678	\$3.95	\$3.45	\$3.15
Double Adaptor - Gold Plated	PA-3570	\$5.95	\$5.25	\$4.75

PANEL MOUNT - RCA SOCKET TO SOCKET

Gold plated, panel mounted RCA socket to RCA socket adaptors.

- Insulated



PS-0441

PS-0442

PS-0443

PS-0444

PS-0445

PS-0446

Allows you to plug straight into the back of the socket

Type	Cat.	Qty 1+	Qty 4+	Qty 10+
Yellow	PS-0441	\$3.60	\$3.15	\$2.85
Red	PS-0442	\$3.60	\$3.15	\$2.85
Black	PS-0443	\$3.60	\$3.15	\$2.85
Green	PS-0444	\$3.60	\$3.15	\$2.85
Blue	PS-0445	\$3.60	\$3.15	\$2.85
White	PS-0446	\$3.60	\$3.15	\$2.85

**RCA STYLE ADAPTOR LEADS
IN ADDITION TO THE PRODUCTS ABOVE, WE ALSO
HAVE A LARGE RANGE OF INTERCONNECTION LEADS
WITH RCA PLUGS OR SOCKETS ON ONE END AND RCAS
- OR MANY OTHER TYPES ON THE OTHER.**

RCA PLUG TO ADAPTORS



PA-3508



PA-3597



PA-3510



PA-3676



PA-3677



PA-3655



PA-3566

Type	Cat.	Qty 1+	Qty 4+	Qty 10+
RCA Plug to 3.5mm Mono Socket	PA-3508	\$1.95	\$1.75	\$1.55
RCA Male to RCA Male Socket	PA-3597	\$2.95	\$2.60	\$2.30
RCA Plug to 6.5mm Mono Socket	PA-3510	\$1.95	\$1.75	\$1.55
RCA Plug to PAL TV Socket	PA-3676	\$3.95	\$3.45	\$3.15
RCA Male to F-81 Socket	PA-3677	\$3.45	\$3.05	\$2.75
RCA Plug to BNC Female Socket	PA-3655	\$3.95	\$3.45	\$3.15
RCA Adaptor	PA-3566	\$4.95	\$4.45	\$3.90

GOLD PLATED CONNECTORS

FOR USE WITH WALLPLATES



PS-0490/91



PS-0492/93



PS-0494



PS-0495/96



PS-0498

Type	Cat.	Qty 1+	Qty 2+	Qty 5+
Binding Post with Banana - Red	PS-0490	\$3.95	\$3.45	\$3.15
Binding Post with Banana - Black	PS-0491	\$3.95	\$3.45	\$3.15
Banana Socket Binding Post - Red	PS-0492	\$2.95	\$2.60	\$2.30
Banana Socket Binding Post - Black	PS-0493	\$2.95	\$2.60	\$2.30
RCA Socket to F-61 Socket	PS-0494	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Blue	PS-0489	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Red	PS-0495	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Black	PS-0496	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Yellow	PS-0497	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Green	PS-0499	\$2.45	\$2.15	\$1.95
F-61 Socket to F-61 Socket	PS-0498	\$2.45	\$2.15	\$1.95

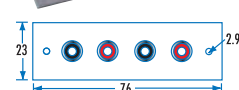
RCA PHENOLIC SOCKETS



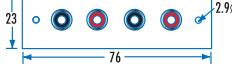
PS-0262



PS-0263



PA-0265



PS-0266



PS-0268

Type	Cat.	Qty 1+	Qty 10+	Qty 50+
1 Way	PS-0262	\$0.95	\$0.85	\$0.75
2 Way	PS-0263	\$1.60	\$1.40	\$1.25
4 Way	PA-0265	\$2.25	\$2.00	\$1.80
4 Way Gold Plated	PA-0266	\$3.45	\$3.05	\$2.75
6 Way	PS-0268	\$3.95	\$3.45	\$3.15

AV WALLPLATES & INSERTS

WALLPLATES

WALLPLATE INSERTS FOR AV OUTLETS

This series of blank wallplate inserts and AV connectors are designed to provide custom audio/video outlets. Provide stereo line level audio to a house or office, for example, or install cable TV outlets throughout the house. All fit standard household power point bases and brackets. The AV connectors fit only one way in the plates, so you have a front and rear connection.



PS-0292



PS-0293



PS-0294



PS-0480



PS-0481



PS-0482



PS-0483



PS-0484



PS-0485



PS-0486

Type	Cat.	Qty 1+	Qty 2+	Qty 5+
2 Way	PS-0292	\$7.95	\$6.95	\$6.25
3 Way	PS-0293	\$8.95	\$7.95	\$6.95
4 Way	PS-0294	\$9.95	\$8.75	\$7.75
Blank Plate	PS-0480	\$2.50	\$2.21	\$1.95
1 Way Plate	PS-0481	\$2.95	\$2.60	\$2.30
2 Way Plate	PS-0482	\$2.95	\$2.60	\$2.30
3 Way Plate	PS-0483	\$2.95	\$2.60	\$2.30
4 Way Plate	PS-0484	\$2.95	\$2.60	\$2.30
6 Way Plate	PS-0485	\$2.95	\$2.60	\$2.30
8 Way Plate	PS-0486	\$2.95	\$2.60	\$2.30

KEYSTONE INSERTS

INSERTS FOR KEYSTONE WALLPLATES

A range of inserts to cater for computer and Audio video applications. They fit standard 110 keystone wallplates and allow you to configure your installation any way you like.



PS-0749



PS-0753



PS-0795



PS-0761



PS-0763



PS-0764



PS-0765



PS-0767



PS-0794



PS-0798



PS-0769



PS-0771



PS-0796



PS-0797



PS-0773



PS-0774



PS-0775



PS-0777



PS-0779



PS-0799

Type	Cat.	Qty 1+	Qty 5+	Qty 10+
TOSLINK - TOSLINK	PS-0749	\$3.95	\$3.45	\$3.15
USB - USB Female	PS-0753	\$4.95	\$4.45	\$3.90
USB - USB - Right Angle	PS-0795	\$5.50	\$4.90	\$4.30
F81 - F81 - White	PS-0761	\$2.95	\$2.60	\$2.30
BNC - BNC - White	PS-0763	\$2.95	\$2.60	\$2.30
RCA - RCA - White	PS-0764	\$2.95	\$2.60	\$2.30
RCA - RCA - Red	PS-0765	\$2.95	\$2.60	\$2.30
RCA - RCA - Yellow	PS-0767	\$2.95	\$2.60	\$2.30
RCA - RCA - Blue	PS-0794	\$2.95	\$2.60	\$2.30
RCA - RCA - Green	PS-0798	\$2.95	\$2.60	\$2.30
S-Video - S-Video	PS-0769	\$3.95	\$3.45	\$3.15
HDMI - HDMI - White	PS-0771	\$9.95	\$8.75	\$7.75
HDMI - HDMI Right Angle	PS-0796	\$9.95	\$8.75	\$7.75
HDMI - HDMI with Flylead	PS-0797	\$12.95	\$11.35	\$10.35
USB - USB - White	PS-0773	\$4.95	\$4.45	\$3.90
4mm Banana - Red	PS-0774	\$2.95	\$2.60	\$2.30
4mm Banana - Black	PS-0775	\$2.95	\$2.60	\$2.30
3.5mm Stereo Socket	PS-0777	\$2.95	\$2.60	\$2.30
Blank Insert	PS-0779	\$0.30	\$0.25	\$0.24
USB 3.0 - USB 3.0 - White	PS-0799	\$12.95	\$11.35	\$10.35

VGA WALLPLATES & SOCKETS

15 PIN VGA SOCKET WALLPLATE

A wallplate that can be used on projectors, monitors and high end TVs. Comes with mounting hardware, screws and screw mounting centres for easy flush mount installation.

- Installation is made easy via the screw terminal on the rear mounted PCB.



Cat.	Qty 1+	Qty 2+	Qty 5+
PT-0476	\$19.95	\$17.70	\$15.70

VGA WALLPLATE WITH 3.5MM AUDIO SOCKET

Standard wallplate with VGA and 3.5mm audio socket.



Cat.	Qty 1+	Qty 5+	Qty 10+
PT-0477	\$19.95	\$17.70	\$15.70


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2.5MM

2.5MM SUBMINIATURE PLUGS



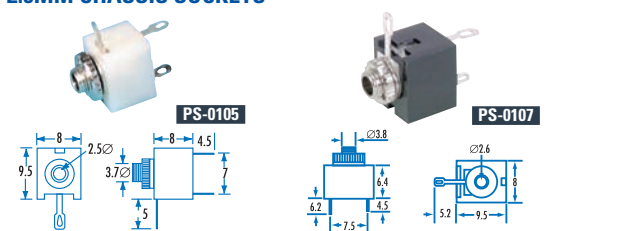
↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Mono	PP-0100	\$0.75	\$0.65	\$0.60
Stereo	PP-0103	\$1.25	\$1.10	\$0.97
Stereo Right Angled	PP-0104	\$3.95	\$3.45	\$3.15
4 Contact	PP-0101	\$2.95	\$2.60	\$2.30

2.5MM LINE SOCKET



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Stereo	PS-0109	\$1.95	\$1.75	\$1.55


2.5MM CHASSIS SOCKETS



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Mono	PS-0105	\$0.95	\$0.85	\$0.75
Stereo	PS-0107	\$1.95	\$1.75	\$1.55


2.5MM SURFACE MOUNT SOCKETS

• Packet of 10



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 25+
SMD Stereo Switched	PS-0110	\$19.95	\$17.70	\$15.70

2.5MM ADAPTORS



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
2.5mm Stereo Plug to 3.5mm Stereo Right Angle Socket	PA-3502	\$3.95	\$3.45	\$3.15
2.5mm Mono Plug to 6.5mm Mono Socket	PA-3504	\$1.95	\$1.75	\$1.55
2.5mm Stereo Plug to 3.5mm Stereo Socket	PA-3532	\$3.95	\$3.45	\$3.15


2.5MM STEREO CONNECTOR & LINE PLUG - IP67



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
2.5mm Stereo Connector	PS-0789	\$14.95	\$13.35	\$11.70
Stereo Line Plug with 1m Cable	PP-0787	\$12.95	\$11.35	\$10.35


3.5MM

3.5MM MINIATURE PLUGS




↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Mono	PP-0114	\$0.85	\$0.75	\$0.65
Stereo	PP-0130	\$1.25	\$1.10	\$0.97
Stereo Right Angled	PP-0136	\$1.85	\$1.65	\$1.45
4 Contact	PP-0138	\$4.95	\$4.45	\$3.90

METAL PLUGS WITH CABLE PROTECTION SPRING




↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Mono	PP-0116	\$1.45	\$1.30	\$1.15
Stereo	PP-0135	\$1.85	\$1.65	\$1.45
Stereo Gold Plated	PP-0131	\$2.45	\$2.15	\$1.95

3.5MM LINE SOCKETS



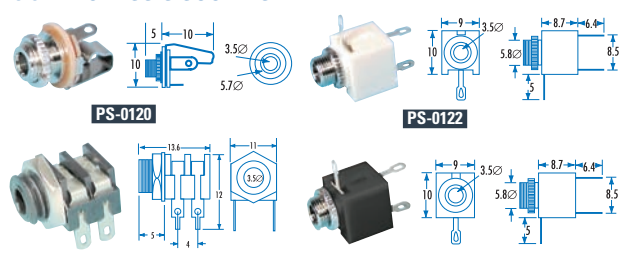
↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Mono	PS-0126	\$1.45	\$1.30	\$1.15
Stereo	PS-0134	\$1.95	\$1.75	\$1.55
Stereo Gold Plated	PS-0139	\$4.95	\$4.45	\$3.90

SLIMLINE - GOLD PLUGS



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Stereo	PP-0132	\$3.25	\$2.90	\$2.60
4 Pole	PP-0134	\$4.95	\$4.45	\$3.90

3.5MM CHASSIS SOCKETS



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Mono Open	PS-0120	\$1.45	\$1.30	\$1.15
Mono Enclosed	PS-0122	\$0.95	\$0.85	\$0.75
Mono Insulated	PS-0123	\$2.45	\$2.15	\$1.95
Stereo	PS-0132	\$1.35	\$1.20	\$1.05

TECH TALK!

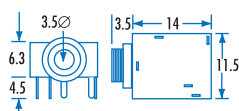
JACK PLUG also known as a phone plug (US) or TRS (tip, ring, sleeve). Available as mono or stereo versions in several common diameters:

- 2.5mm - the smallest size used where space is a premium. Was once used as a mono earphone plug but now has multichannel functions.
- 3.5mm - the mini plug, which in the stereo version is widely found on headphones used with portable audio such as MP3 players etc. It is also a standard connector used on PC sound cards. The mono version is occasionally used as a DC power connector.
- 6.5mm - the largest size; the mono version is used on guitar & microphone leads, while the stereo version is often used on Hi-Fi headphones. The 6.5mm (or 1/4" phone plug) was originally used for manual telephone switchboards particularly the 'Sylvester' type

3.5MM & 6.5MM CONNECTORS

3.5MM (CONTINUED)

3.5MM PCB SOCKET



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
PCB Stereo Switched	PS-0133	\$1.65	\$1.45	\$1.30

3.5MM ADAPTORS - MONO



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Mono 3.5mm				
Plug to RCA Socket	PA-3500	\$1.95	\$1.75	\$1.55
Plug to 6.5mm Mono Socket	PA-3506	\$1.95	\$1.75	\$1.55
Plug to 3.5mm Stereo Socket	PA-3584	\$1.95	\$1.75	\$1.55
Plug to 6.5mm Stereo Socket	PA-3594	\$1.95	\$1.75	\$1.55

3.5MM ADAPTORS - STEREO



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Stereo 3.5mm				
Plug to 6.5mm Stereo Socket	PA-3586	\$2.95	\$2.60	\$2.30
Plug to 3.5mm Stereo R/A Socket	PA-3503	\$3.95	\$3.45	\$3.15
Plug to 2.5mm Stereo Socket	PA-3536	\$3.95	\$3.45	\$3.15
Plug to PAL (75 ohm) Socket	PA-3657	\$3.95	\$3.45	\$3.15
Plug to 2 x 3.5mm Stereo Sockets	PA-3582	\$3.95	\$3.45	\$3.15
Plug to 2 x RCA Sockets	PA-3580	\$3.95	\$3.45	\$3.15
Socket to 2 x 3.5mm Mono Plug	PA-3581	\$5.95	\$5.25	\$4.75

3.5MM STEREO SOCKET TO 3.5MM STEREO SOCKET



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-3583	\$1.95	\$1.75	\$1.55

3.5MM STEREO SOCKET TO 2 X RCA SOCKETS ADAPTOR



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-3585	\$2.55	\$2.25	\$1.95

PRODUCT DATA

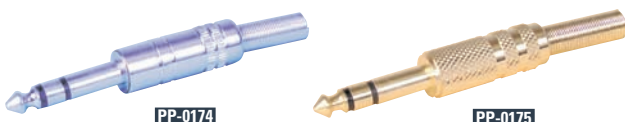
We now have so much data and fact sheets we cannot fit it all here!
Check our website for over 3,500 pages of data!



6.5MM 1/4"

6.5MM 1/4" PLUGS

PLUGS - LINE



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Mono - Plastic	PP-0150	\$1.00	\$0.90	\$0.80
	Mono - Metal	PP-0154	\$1.85	\$1.65	\$1.45
	Mono - Gold	PP-0156	\$3.65	\$3.15	\$2.90
	Mono - Red	PP-0151	\$4.95	\$4.45	\$3.90
	Mono - Black	PP-0152	\$4.95	\$4.45	\$3.90
	Stereo - Plastic	PP-0170	\$1.45	\$1.30	\$1.15
	Stereo - Metal	PP-0174	\$2.45	\$2.15	\$1.95
	Stereo - Gold	PP-0175	\$5.25	\$4.60	\$4.15
	Stereo - Red	PP-0177	\$4.95	\$4.45	\$3.90
	Stereo - Black	PP-0178	\$4.95	\$4.45	\$3.90

6.5mm PRO METAL PLUGS

Made especially for the rigours of the road or anywhere where a heavy duty, tough 6.5mm plug is called upon. The mono plugs feature blue identification rings, whereas the stereo plugs have black rings. This is particularly handy if you have a combination of stereo and mono plugs on the one mixing desk or patch bay.



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Mono Metal - Pro	PP-0157	\$5.45	\$4.90	\$4.30
	Stereo Metal - Pro	PP-0179	\$6.45	\$5.75	\$4.95

RIGHT ANGLE PLUGS

Super tough all metal construction plug for harsh environments and musos who want the best.

- Use with 6mm O.D. cable
- Strain relief provided.



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Pro Right Angle	PP-0159	\$4.95	\$4.45	\$3.90
	Right Angle	PP-0158	\$1.95	\$1.75	\$1.55
	Stereo Right Angle	PP-0176	\$2.50	\$2.21	\$1.95

6.5MM 1/4" (CONTINUED)

6.5MM 1/4" LINE SOCKETS



Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Mono	PS-0166	\$1.65	\$1.45	\$1.30
Stereo	PS-0194	\$1.95	\$1.75	\$1.55

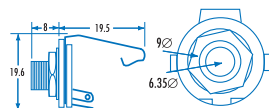
6.5MM 1/4" FLUSH PANEL SOCKET

Ever tried to mount a 6.5mm socket in a wooden box? It was impossible! Now it's easy with our unique plastic mounting aid.



Type	Cat.	Qty 1+	Qty 5+	Qty 10+
Socket Mounting Cup	HS-8025	\$2.50	\$2.20	\$1.95

6.5MM 1/4" CHASSIS SOCKETS

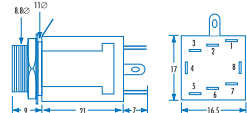
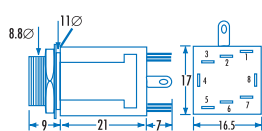
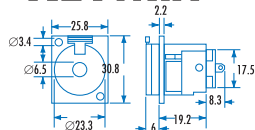


PROFESSIONAL LOCKING CHASSIS JACK

Metal shell, mates with all mono and stereo 6.5mm (1/4") phono plugs. Plug locking feature keeps plug in the socket.



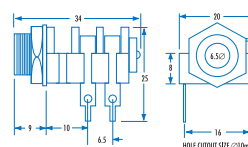
NEUTRIK



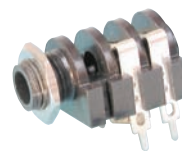
Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Mono Open Unswitched	PS-0162	\$1.95	\$1.75	\$1.55
Mono & Stereo	PS-0196	\$19.95	\$17.70	\$15.70
Stereo Switched DPDT	PS-0182	\$2.95	\$2.60	\$2.30
Stereo Insulated Switched	PS-0184	\$3.45	\$3.05	\$2.75

6.5MM PCB / CHASSIS SOCKETS

MONO INSULATED

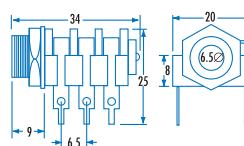


Closed when plug is NOT inserted



INSULATED DPST SWITCHED - STEREO

Works OK in mono

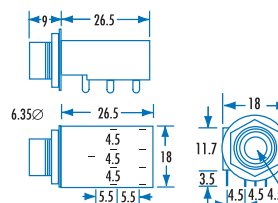


INSULATED UNSWITCHED - STEREO

Works OK in mono

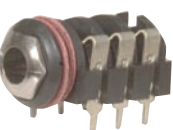
STEREO

- Sub-panel fixing



HIGH QUALITY - STEREO

- Switching DPST.
- Black plastic front insert
- Glossy chrome-finish nut.
- Stereo, but can be used for mono.
- Minimum Life: 10,000 insert/withdraw cycles
- Contact Rating: 2.5A at 48VDC



Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Switched	PS-0160	\$2.45	\$2.15	\$1.95
Stereo Insulated DPST Switched	PS-0190	\$2.95	\$2.60	\$2.30
Stereo Insulated Unswitched	PS-0192	\$2.75	\$2.45	\$2.15
Stereo	PS-0180	\$2.95	\$2.60	\$2.30
Stereo	PS-0195	\$5.95	\$5.25	\$4.75

6.5MM ADAPTORS



Type	Cat.	Qty 1+	Qty 4+	Qty 10+
6.5mm Mono Socket to 6.5mm Mono Plug	PA-3588	\$1.95	\$1.75	\$1.55
Mono Plug to RCA Socket	PA-3592	\$1.95	\$1.75	\$1.55
Mono Plug to 2 x 6.5mm				
Mono Sockets	PA-3534	\$3.95	\$3.45	\$3.15
Stereo Plug 3.5mm Stereo Socket	PA-3590	\$1.95	\$1.75	\$1.55
Stereo Plug to 2 x 6.5mm				
Stereo Socket	PA-3530	\$3.95	\$3.45	\$3.15
Stereo Socket to 6.5mm Stereo Socket	PA-3591	\$3.95	\$3.45	\$3.15

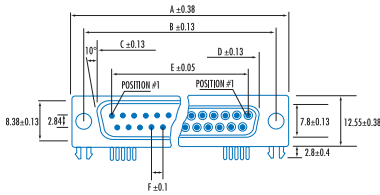
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D-SUB DATA CONNECTORS

D CONNECTORS

D - IDC



Size	A	B	C	D	E	F
9 Pin	30.81	24.99	16.92	16.24	11.09	2.74
25 Pin	53.04	47.04	38.96	38.38	33.24	2.77

Sizes shown in mm



PP-0821



PS-0846

↑ Type	Pin	Cat.	Qty 1+	Qty 10+	Qty 50+
IDC Plug	9 Pin	PP-0802	\$3.95	\$3.45	\$3.15
IDC Plug	15 Pin	PP-0821	\$4.45	\$3.95	\$3.45
IDC Plug	25 Pin	PP-0842	\$4.65	\$4.15	\$3.60
IDC Socket	9 Pin	PS-0805	\$3.95	\$3.45	\$3.15
IDC Socket	15 Pin	PS-0825	\$4.45	\$3.95	\$3.45
IDC Socket	25 Pin	PS-0846	\$4.65	\$4.15	\$3.60

D MALE / FEMALE

MALE SOLDER

All 'D' connectors have quality gold plated contacts & nickel plated shells.



PP-0800



PS-0804



PP-0843



PS-0845

↑ Type	Pin	Cat.	Qty 1+	Qty 10+	Qty 50+
Plug Solder	9 Pin	PP-0800	\$1.45	\$1.30	\$1.15
Plug Solder	15 Pin	PP-0820	\$1.95	\$1.75	\$1.55
Plug Solder	15HD Pin	PP-0831	\$3.65	\$3.15	\$2.90
Plug Solder	25 Pin	PP-0840	\$1.95	\$1.75	\$1.55
Plug Solder	37 Pin	PP-0860	\$4.95	\$4.45	\$3.90
Socket Solder	9 Pin	PS-0804	\$1.95	\$1.75	\$1.55
Socket Solder	15 Pin	PS-0824	\$1.95	\$1.75	\$1.55
Socket Solder	15HD Pin	PS-0832	\$3.65	\$3.15	\$2.90
Socket Solder	25 Pin	PS-0844	\$1.95	\$1.75	\$1.55
Socket Solder	37 Pin	PS-0864	\$4.95	\$4.45	\$3.90
R/A Plug Solder	9 Pin	PP-0803	\$2.95	\$2.60	\$2.30
R/A Plug Solder	25 Pin	PP-0843	\$3.65	\$3.15	\$2.90
R/A Socket Solder	9 Pin	PS-0806	\$2.95	\$2.60	\$2.30
R/A Socket Solder	25 Pin	PS-0845	\$3.65	\$3.15	\$2.90

D-SUB IP67 HARSH ENVIRONMENT

Robust D-Sub connectors housed in industrial body and IP67 waterproof housing.

- Current rating 5A,
- -40° to +105°C
- Gold flash plating on contacts

LTW[®]



PS-1210



PP-1226



PS-1220

↑ Type	Pin	at.	Qty 1+	Qty 10+	Qty 50+
Plug Solder	9 Pin	PP-1216	\$17.95	\$15.95	\$14.35
Plug Solder	25 Pin	PP-1226	\$19.95	\$17.70	\$15.70
Socket Solder	9 Pin	PS-1210	\$17.95	\$15.95	\$14.35
Socket Solder	25 Pin	PS-1220	\$19.95	\$17.70	\$15.70

PANEL MOUNT SOCKETS - PUSH-IN TERMINAL BLOCK

Range of panel connectors with mainly screwless, push in wire terminals. These products are ideal for prototyping, home cinema, computer or other applications where circuit changes need to be quickly made without cumbersome soldering, or where hand soldering direct to the connectors is almost impossible!

- 6 models to choose from:

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
DB25	PS-0812	\$14.95	\$13.35	\$11.70
DB15HD	PS-0813	\$11.95	\$10.70	\$9.50
DVI	PS-0814	\$16.95	\$14.95	\$13.35
DisplayPort	PS-0815	\$14.95	\$13.35	\$11.70
USB 3.0	PS-0816	\$9.95	\$8.75	\$7.75
HDMI	PS-0817	\$12.95	\$11.35	\$10.35

D BACKSHELLS

PLASTIC

Screws supplied.



ABS FLAMEPROOF D BACKSHELLS

Top quality grey back shells with two cable entries.

- Rear or side entry.
- Simply push out the tab required.
- Supplied with 2 long finger screws, cable clamp screws and hood fixing screws.
- A quality range of backshells.

METAL

Quality heavy duty metal backshells.

- Ideal where RF screening is required.
- Rear entry.



DB25/DB25 HOOD

Ideal for making your own special adaptors.

- Accepts 2 x D25 connectors.
- Either plugs or sockets.



↑ Type	Pin	Cat.	Qty 1+	Qty 10+	Qty 50+
Plastic D Backshells	9 Pin	PM-0808	\$2.25	\$1.95	\$1.80
Plastic D Backshells	15 Pin	PM-0828	\$2.45	\$2.15	\$1.95
Plastic D Backshells	25 Pin	PM-0848	\$2.95	\$2.60	\$2.30
Plastic D Backshells	37 Pin	PM-0868	\$3.95	\$3.45	\$3.15
Metal D Backshells	9 Pin	PM-0812	\$3.95	\$3.45	\$3.15
Metal D Backshells	15 Pin	PM-0833	\$4.95	\$4.45	\$3.90
Metal D Backshells	25 Pin	PM-0847	\$6.95	\$6.25	\$5.50
ABS D Backshells	9 Pin	PM-0810	\$2.95	\$2.60	\$2.30
ABS D Backshells	15 Pin	PM-0830	\$3.25	\$2.90	\$2.60
ABS D Backshells	25 Pin	PM-0850	\$3.95	\$3.45	\$3.15

D HARDWARE

SUB HEX NUT EXTENDERS

Pkt of 8 pairs (16 pcs) 6mm hex nut extenders for D connectors.

- Double female screw adaptor.
- Pack of 8 pairs



THUMB SCREWS FOR D BACKSHELLS

Pkt of 4 pairs (8 pcs) of universal thumb screws for D backshells.

- Total length 44mm.
- Pack of 4 pairs



LOCKING NUTS FOR D CONNECTORS

Packets of 5 pairs (10 pcs.) of D locking nuts.

- Includes screws, nuts and washers.
- 6mm length.
- Pack of 5 pairs



JACK SCREW TO SUIT D-SUB

- 13mm length



↑ Type	Pack	Cat.	Qty 1+	Qty 10+	Qty 50+
Hex Nut Extenders	8	PM-0857	\$4.95	\$4.45	\$3.90
Thumb Screws	4	PM-0859	\$4.95	\$4.45	\$3.90
Jack Screw	-	PM-0854	\$0.75	\$0.65	\$0.60
Jack Screw Locking	5	PM-0852	\$4.95	\$4.45	\$3.90

LOCKING NUT SET FOR D-CONNECTORS

Suits D connectors.

- Length 13mm.



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Hex Nut Extenders	PM-0855	\$2.95	\$2.60	\$2.30

RJ45 MODULAR

MODULAR PLUGS

50µ" Gold Contact

8/8 - RJ45

• Not ACMA Approved



↑ Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
10	PP-1436	\$7.95	\$6.95	\$6.25

SCREENED 8 PIN FOR STRANDED CABLE

8P8C with full screening and round cable entry for connection to STP cable.



↑ Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
10	PP-1437	\$14.95	\$13.35	\$11.70

RJ45 MODULAR PLUGS FOR

STRANDED/SOLID CAT 6 CABLE PK10

RJ45 Modular Plugs for Stranded and Solid Cat 6 Cable. Pack of 10



↑ Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
RJ45 Standard - Pack of 10	PP-1447	\$13.95	\$12.35	\$10.95

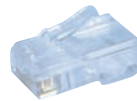
8 PIN FOR FLAT STRANDED CABLE

8/8 - RJ45



8 PIN FOR ROUND SOLID CORE CABLE

8/8 RJ45 Suits Cat5e



↑	Cat.	Qty 1+	Qty 5+	Qty 20+
RJ45 Standard - Pack of 5	PP-1434	\$5.95	\$5.25	\$4.75
RJ45 Standard - Pack of 50	PP-1435	\$29.95	\$26.90	\$23.70
RJ45 Solid - Pack of 6	PP-1438	\$6.95	\$6.25	\$5.50
RJ45 Solid - Pack of 50	PP-1439	\$34.95	\$31.45	\$27.90

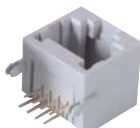
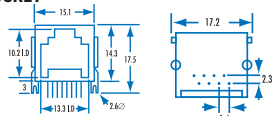
RJ45 BOOTS

A packet of boots to suit RJ45 8/8 plugs.



↑ Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
10	PM-1441	\$4.95	\$4.45	\$4.15
50 Blue	PM-1442	\$15.50	\$13.70	\$12.95

8 PIN PCB MODULAR SOCKET

• Side entry
• Not ACMA approved

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
8/8 - RJ45	PS-1478	\$2.45	\$2.15	\$1.95

WATERPROOF RJ45 CABLE CONNECTOR HOUSING

Allows you to join two Cat5e cables while providing a robust and waterproof connection. Use around the garage, factory or workshop to avoid dust or water ingress, or to survive the knocks and bumps around the office. Includes 2-way Cat5 joiner, but will also accommodate any connector that fits within the internal dimensions of the housing.

- IP Rating: IP68
- Accepts cables: 4 - 7mm Dia.
- Dimensions: 120(L) x 35(Dia.)mm



*Not ACMA approved



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Way	PS-4064	\$18.95	\$16.95	\$14.95

RJ45 CONNECTORS IP67 RATED

This set of connectors makes it safe to use RJ45 connectors in harsh environments. Rated to IP67 they are dust tight and water tight making them handy for control and communications applications outdoors or industry workshops.

LTW®



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Socket	PS-1450	\$27.95	\$24.95	\$22.35
Plug	PP-1452	\$14.95	\$13.35	\$11.70
Cap	PP-1454	\$8.95	\$7.95	\$6.95

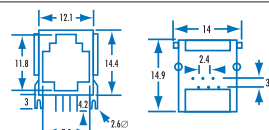
RJ11/12 MODULAR

50µ" Gold Contact

4 PIN FOR STRANDED CABLE
4/4 - RJ116 PIN FOR STRANDED CABLE
6/6 - RJ12

↑ Type	Cat.	Qty 1+	Qty 5+	Qty 20+
RJ11 - Pack of 5	PP-1430	\$2.45	\$2.15	\$1.95
RJ11 - Pack of 50	PP-1431	\$19.95	\$17.70	\$15.70
RJ12 - Pack of 5	PP-1432	\$2.95	\$2.60	\$2.30
RJ12 - Pack of 50	PP-1433	\$23.95	\$21.35	\$18.95

PCB MODULAR SOCKETS

Side entry.
Not ACMA Approved

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
4/4 - RJ11	PS-1470	\$1.65	\$1.45	\$1.30
6/6 - RJ12	PS-1474	\$1.95	\$1.75	\$1.55

TELEPHONE

PLUG 610 TYPE WALL SKT

For other telephone leads, adaptors - see our Computer & Multimedia section

- Blister pack.
- ACMA Approved

Note: Not available in New Zealand



↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	PS-1410	\$6.95	\$6.25	\$5.50

4 WAY PUNCHDOWN BLOCK CONNECTOR

For use with standard 110 punch down tools.
PCB mounting.

↑	Qty 1+
4 Way	PT-5000 \$0.25

WALLPLATES & KEYSTONE SOCKETS

AUSTRALIAN / NZ FLUSH PLATES

Our premium Australian / NZ flush plates not only accept our Cat 5e jacks shown below, they are also compatible with many other standard Australian mechanisms and jacks. The 2 piece design has a separate back plate and cover which is easily removed for painting.

- Fits standard Australian/NZ electrical switch plate installation hardware and screw centres.
- Perfect for easy flush installation on Gyprock walls.
- Supplied unloaded without jacks (see cat. YN-8036).
- Dimensions 116(W) x 75(H) x 13(D)mm.



YN-8015



YN-8016



YN-8017

↑ Type	Cat.	Qty 1+	Qty 4+	Qty 10+
Single	YN-8015	\$5.95	\$5.25	\$4.75
Double	YN-8016	\$5.95	\$5.25	\$4.75
Triple	YN-8017	\$5.95	\$5.25	\$4.75

+ ALSO SEE PAGE 408 OR 512 FOR WALLPLATES TO SUIT

INSERTS FOR KEYSTONE WALLPLATES



YN-8026



YN-8027



YN-8028



YN-8029

↑ Type	Cat.	Qty 1+	Qty 5+	Qty 10+
RJ11	YN-8026	\$4.95	\$4.45	\$3.90
RJ12	YN-8027	\$4.95	\$4.45	\$3.90
RJ45 Cat5e	YN-8028	\$4.95	\$4.45	\$3.90
RJ45 Cat6	YN-8029	\$4.95	\$4.45	\$3.90

WALLPLATES & KEYSTONE SOCKETS (CONTINUED)

RJ12 IDC SOCKET FOR FLUSH PLATES

Voice grade RJ12 6P4C IDC jack with 2 IDC connections per contact allowing easy loop-in, loop-out for typical voice applications. Compatible with most standard Australian flush plates. Rear termination with IDC impact tool.

↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YN-8035	\$12.95	\$11.35	\$10.35



CAT 5E IDC JACK TO SUIT AUSTRALIAN / NZ STYLE FLUSH PLATES

Our premium Cat 5e IDC data jack is designed to suit our wallplates shown above. They also suit many other brands of Australian/NZ flush plates.

- Rear terminated with 110 or Krone impact tool.
- T568A & T568B colour coding for easy installation.
- ACMA Approved.
- Suit YN-8015/16/17 flush plates.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8036	\$12.95	\$11.35	\$10.35

KEYSTONE SURFACE BOX

Side entry surface mount boxes to accept our standard keystone 110 jacks.

- Snap-on cover for easy installation & access to wiring.
- Single and duplex versions available.
- Double sided tape for easy installation.
- Supplied unloaded without keystone jacks.
- Colour is white.



↑	W x H x D (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Single 30 x 60 x 26	YN-8022	\$5.95	\$5.25	\$4.75
	Double 55 x 60 x 26	YN-8024	\$5.95	\$5.25	\$4.75

110 KEYSTONE JACK

Suitable for use with our keystone wall plates and keystone surface boxes.

- For termination with ISBY impact tool and has combined 568A and T568B colour coding for easy installation.
- White in colour.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8030	\$12.95	\$11.35	\$10.35

USB

TYPE A & TYPE B PLUGS

With solder lugs.



PP-0790



PP-0792

↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	A	PP-0790	\$2.45	\$2.15	\$1.95
	B	PP-0792	\$2.45	\$2.15	\$1.95

TYPE A & TYPE B PC MOUNT SOCKETS

4P4C.



PS-0916



PS-0920



PS-0922

NEW 2015

↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	A	PS-0916	\$2.95	\$2.60	\$2.30
	B	PS-0920	\$2.95	\$2.60	\$2.30
	Micro B NEW	PS-0922	\$2.95	\$2.60	\$2.30

TYPE A IP67 RATED PLUG CABLES

Industrial USB connectors encased in robust housing with IP67 seal.

- Current rating 1.5A
- -40° to +105°C
- PBT UL94V-0 body



LTW[®] PP-0784



PS-0786

↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	A Male 1m Lead	PP-0784	\$12.95	\$11.35	\$10.35
	A Female 1m Lead	PS-0786	\$15.95	\$14.35	\$12.70

TYPE A PANEL MOUNT USB SOCKETS

Panel-mounting Type A USB socket.

- Suits panels up to 10mm thick.
- Mounting hole 20mm



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	A Female	PS-0782	\$19.95	\$17.70	\$15.70

TYPE B IP67 RATED PLUG CABLES

Popular USB Type B connector.

- IP67 rated for harsh environments
- 1 metre cable extension.

Plug or socket version available:



PP-0785



PS-0781

↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	IP67 Rated Type B USB Plug Cable	PP-0785	\$16.95	\$14.95	\$13.35
	IP67 Rated Type B USB Socket Cable	PS-0781	\$18.95	\$16.95	\$14.95

USB A SOCKET TO RIGHT-ANGLE SAMSUNG[®] OTG ADAPTOR

Allows you to connect a USB peripheral such as a USB flash drive or USB hub to your Samsung[®] Galaxy Tablet.



NEW 2015

↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	210mm	WC-7747	\$4.95	\$4.45	\$4.00

USB 3.0 ADAPTORS



PA-0930



PA-0931



PA-0932



PA-0933

↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	USB 3.0 Plug B to Socket A	PA-0930	\$9.95	\$8.75	\$7.75
	USB 3.0 Micro B Plug to Socket A	PA-0931	\$9.95	\$8.75	\$7.75
	USB 3.0 Socket A to Socket A	PA-0932	\$9.95	\$8.75	\$7.75
	USB 3.0 Plug Micro B to Socket B	PA-0933	\$9.95	\$8.75	\$7.75

FME

FME LINE

As used on some mobile phone car kits.

- Crimp
- Nickel plated
- Gold centre pin

SEE PAGE 133 FOR CRIMP TOOLS

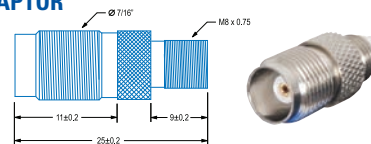


PP-0710

PS-0712

↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Plug	PP-0710	\$4.95	\$4.45	\$3.90
	Socket	PS-0712	\$3.95	\$3.45	\$3.15

FME - TNC FEMALE ADAPTOR



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Female to Female	PA-0619	\$5.95	\$5.25	\$4.75

TNC

LINE PLUGS



PP-0664



PP-0665

↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Solder	PP-0664	\$3.95	\$3.45	\$3.15
	Crimp - RG58U	PP-0665	\$3.95	\$3.45	\$3.15
	Crimp - RG59U	PP-0667	\$3.95	\$3.45	\$3.15

SMA

SMA CONNECTORS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Line Plug - RG58 - Crimp	PP-0632	\$5.65	\$4.95	\$4.45
	Right Angle Plug - RG174 - Crimp	PP-0631	\$5.95	\$5.25	\$4.75
	Line Socket - RG174 - Solder	PS-0634	\$4.95	\$4.45	\$3.90

SMA REVERSE



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Reverse Line Plug - RG174U	PP-0590	\$5.95	\$5.25	\$4.75
	Reverse Line Socket	PP-0592	\$5.95	\$5.25	\$4.75
	Reverse PCB RA Plug - Solder	PP-0594	\$2.95		

SMA ADAPTORS



↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	SMA Socket to Reverse SMA Plug	PA-0627	\$6.95	\$6.25	\$5.50
	SMA Socket to Reverse SMA Socket	PA-0629	\$6.95	\$6.25	\$5.50
NEW	SMA Plug to Reverse SMA Plug	PA-0628	\$6.95	\$6.25	\$5.50
	SMA Plug to PL259 Socket	PA-0612	\$7.95	\$7.10	\$6.25



↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	FME Socket to SMA Socket	PA-0620	\$4.95	\$4.45	\$3.90
	SMA Socket to FME Plug	PA-0621	\$4.95	\$4.45	\$3.90
	SMA Plug to SMA Plug	PA-0622	\$4.95	\$4.45	\$3.90
	SMA Socket to BNC Socket	PA-0624	\$4.95	\$4.45	\$3.90
	SMA Plug to BNC Socket	PA-0615	\$5.95	\$5.25	\$4.75



↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	N Plug to SMA Socket	PA-0616	\$6.95	\$6.25	\$5.50
	N Socket to SMA Socket	PA-0617	\$6.95	\$6.25	\$5.50
	SMA Coupler	PA-0635	\$6.95	\$6.25	\$5.50

SMA FACTORY PRECRIMPED COAX LEADS

- SMA plug to plug - Gold plated connectors
- RG316 high quality coax cable
- Bandwidth up to 2.9GHz



↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	1m	WC-7800	\$17.95	\$15.95	\$14.35
	3m	WC-7802	\$29.95	\$26.90	\$23.70
	5m	WC-7804	\$39.95	\$35.90	\$31.90

N TYPE



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Line Plug - suits RG58U	PP-0672	\$5.95	\$5.25	\$4.75
	Line Socket - suits RG58U	PS-0673	\$6.95	\$6.25	\$5.50
	Panel Socket	PS-0674	\$6.95	\$6.25	\$5.50

UHF

UHF - MINI MALE LINE PLUGS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Crimp - RG58U	PP-0695	\$4.95	\$4.45	\$3.90
	Crimp - RG59	PP-0694	\$4.95	\$4.45	\$3.90

UHF LINE PLUGS - PL259 TYPE



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Solder - RG-58U - with Reducer	PP-0680	\$2.95	\$2.60	\$2.30
	Solder - RG-8U	PP-0682	\$2.95	\$2.60	\$2.30

UHF JOINER & SOCKET



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Joiner - Double Female	PS-0690	\$3.95	\$3.45	\$3.15
	SO239 Chassis Socket	PS-0686	\$2.95	\$2.60	\$2.30

COAXIAL - PAL

TECH TALK!

These are the standard aerial connectors for TVs and video recorders. They are often called "Belling-Lee" or "PAL" connectors.

75 OHM LINE PLUGS



PP-0600 PP-0602 PP-0604 PP-0606



PP-0607 PP-0608 PS-0622

↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Plastic	PP-0600	\$1.95	\$1.75	\$1.55
	Nickel Plated	PP-0602	\$2.45	\$2.15	\$1.95
	Gold Plated	PP-0604	\$7.95	\$6.95	\$6.25
	R/A Solderless	PP-0606	\$2.95	\$2.60	\$2.30
	Crimp - RG59	PP-0607	\$2.95	\$2.60	\$2.30
	Crimp - RG6	PP-0608	\$2.95	\$2.60	\$2.30
	Joiner	PS-0622	\$1.75	\$1.55	\$1.40

ANTENNA & VIDEO CONNECTORS

COAXIAL - PAL (CONTINUED)

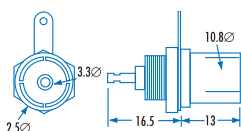
75 OHM LINE SOCKETS



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Plastic	PS-0610	\$1.75	\$1.55	\$1.40
Nickel Plated	PS-0614	\$2.45	\$2.15	\$1.95
Right Angle Solderless	PS-0612	\$3.45	\$3.05	\$2.75
Crimp - RG59	PS-0611	\$2.75	\$2.45	\$2.15
Crimp - RG6	PS-0613	\$2.75	\$2.45	\$2.15
Gold	PS-0605	\$7.95	\$6.95	\$6.25
Joiner	PS-0620	\$1.75	\$1.55	\$1.40

75 OHM CHASSIS MOUNT SOCKET

- Nickel plated
- High quality product



Hole cutout 9.5mm.

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-0628	\$2.95	\$2.60	\$2.30

75 OHM CABLE JOINER

Hardwire connection of 50 to 75Ω coax cable.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-0618	\$2.95	\$2.60	\$2.30

COAXIAL - ADAPTORS



Type	Cat.	Qty 1+	Qty 4+	Qty 10+
PAL Plug to RCA Socket	PA-3675	\$3.95	\$3.45	\$3.15
PAL Socket to PAL Socket	PS-0620	\$1.75	\$1.55	\$1.40
PAL Plug to PAL Plug	PS-0622	\$1.75	\$1.55	\$1.40
PAL Plug to PAL Socket - Right Angle	PA-3679	\$4.95	\$4.45	\$3.90
F Socket to PAL Socket	PA-3656	\$3.95	\$3.45	\$3.15
PAL Plug to F-81	PA-3653	\$3.95	\$3.45	\$3.15
PAL Plug to F-81 Socket - Right Angle	PA-3673	\$4.95	\$4.45	\$3.90
F-59 Plug to PAL Socket	PA-3672	\$1.95	\$1.75	\$1.55
F-59 Plug to PAL Plug	PA-3671	\$2.95	\$2.60	\$2.30
F-59 Plug to F-81 Socket - Right Angle	PA-3674	\$3.95	\$3.45	\$3.15
F-59 Plug to Plug	PA-0633	\$1.65	\$1.45	\$1.30

COAXIAL - F TYPE

TECH TALK!

Used mainly for RF signals such as those for satellite dishes, cable boxes or TV aerials. The highest quality connections between your cable/satellite wallplate output and the cable/satellite box. Standard emerged from the US cable TV industry. Now the Aust./NZ standard.

F TYPE PLUGS

F connectors recommended for all new TV installations

- Suits RG59 or RG6 cable

SEE PAGES 133 FOR
CRIMPING TOOLS & PAGE
208 FOR COAXIAL CABLE



Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Suits RG59	PP-0640	\$0.95	\$0.85	\$0.75
Suits RG6	PP-0641	\$0.95	\$0.85	\$0.75
F-59 Crimp Plug for RG6	PP-0643	\$1.25	\$1.10	\$0.97
F-59 Crimp Plug for RG59U	PP-0644	\$1.25	\$1.10	\$0.97
F-59 Crimp Plug for RG59	PP-0702	\$1.95	\$1.75	\$1.55
F-59 Crimp Connector for RG6 Cable	PP-0704	\$1.95	\$1.75	\$1.55
F-59 Waterproof Compression Plug for RG6 Cable	PP-0708	\$1.95	\$1.75	\$1.55

F TYPE TWIST ON PLUGS

These are ideal crimpless but strong F-plugs for low volume applications. Highly recommended.

F-59 TYPE SCREW-ON PLUGS

Simply strip coax back about 12mm, fold braid/foil back over the plastic outer sheath. Trim about 8mm of foam insulation from centre conductor. Then simply screw the knurled connector on the cable until you see sufficient centre conductor out of the front of the connector. The foam insulation will centrally locate this conductor.

- Nickel plated

↑ Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Suits RG59 Cable	PP-0637	\$1.45	\$1.30	\$1.15
Suits RG6 Cable	PP-0638	\$1.45	\$1.30	\$1.15

CRIMPLESS F-TYPE PLUG TO RG6

No crimping or soldering required.

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-0671	\$2.95	\$2.60	\$2.30

F-59 TOOL-LESS COMPRESSION CRIMP CONNECTOR

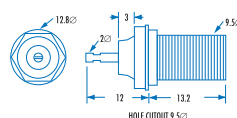
No crimping tool required. Just strip back the outer and inner sheath, fold the braid back and push the connector on. The crimp is reliable with high mechanical strength and will never come off. Suitable for RG6 quad shield coax.

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-0677	\$2.50	\$2.21	\$1.95

F TYPE SOCKETS

F-61 CHASSIS SOCKET

- Hole cutout 9.5mm.
- Nickel plated



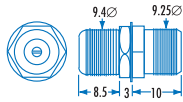
↑	Cat.	Qty 1+	Qty 10+	Qty 50+
F-61 Chassis	PS-0645	\$1.75	\$1.55	\$1.40

COAXIAL - F TYPE (CONTINUED)

F TYPE ADAPTORS

F-81 INLINE JOINER

- Nickel plated



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-0646	\$1.95	\$1.75	\$1.55

F-81 INLINE JOINER - FOXTEL APPROVED

- Socket to Socket
- Foxtel Approved



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PP-0648	\$4.95	\$4.45	\$3.90

F-59 TYPE 75 OHM DUMMY LOAD

Simply screw on to unused ports of splitters, etc to maintain good VSWR.

- Nickel plated



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Dummy Load	PP-0639	\$1.50	\$1.35	\$1.20

F-59 LINE PLUG - SOLDERLESS TYPE

Screw assembly - no soldering is required



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-0709	\$2.95	\$2.60	\$2.30

BNC

TECH TALK!

BNC plugs lock on to the socket and are used for some digital audio connections as well as for video connections, particularly CCTV.

MALE LINE PLUGS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Solder Type	PP-0650	\$3.25	\$2.90	\$2.60
	Crimp RG59	PP-0688	\$3.25	\$2.90	\$2.60
	Crimp RG6	PP-0689	\$4.95	\$4.45	\$3.90
	Solderless Type	PP-0652	\$4.95	\$4.45	\$3.90

CRIMPLESS BNC PLUG TO RG6

No crimping or soldering required.

- Crimple BNC Plug to RG6



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-0675	\$3.50	\$3.15	\$2.75

MALE CRIMP PLUGS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	0.7mm Centre Pin - suits RG59	PP-0647	\$2.95	\$2.60	\$2.30
	0.9mm Centre Pin - suits Belden	PP-0651	\$2.95	\$2.60	\$2.30
	Crimp Type - RG58	PP-0649	\$2.95	\$2.60	\$2.30
	Crimp Type - RG6	PP-0657	\$3.95	\$3.45	\$3.15
	Compression Crimp	PP-0669	\$3.95	\$3.45	\$3.15

CRIMP PLUG BOOT

Suits - PP-0695 Mini UHF plug, PS-0660 BNC female line crimp, PP-0649 BNC RG58 Crimp plug & PP-0651 BNC RG59 Crimp plug.



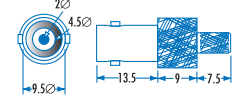
↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	PM-0648	\$1.95	\$1.75	\$1.55

MALE TWIST ON PLUGS



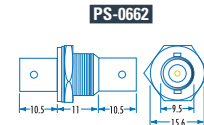
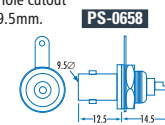
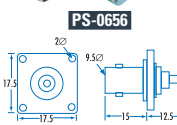
↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Twist on for RG59 0.9mm centre	PP-0678	\$3.95	\$3.45	\$3.15
	Twist on for RG6	PP-0679	\$4.95	\$4.45	\$3.90
	Terminator plug with 50Ω resistor	PP-0655	\$4.95	\$4.45	\$3.90

LINE SOCKETS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Line Socket - RG58	PS-0660	\$4.95	\$4.45	\$3.90
	Line Socket - RG6	PS-0659	\$4.95	\$4.45	\$3.90
	Joiner	PS-0663	\$3.95	\$3.45	\$3.15

CHASSIS SOCKETS



↑	Type	Cat.	Qty 1+	Qty 10+	Qty 50+
	Square Mount	PS-0656	\$2.95	\$2.60	\$2.30
	Single Hole Mount	PS-0658	\$3.95	\$3.45	\$3.15
	Double Female Mount	PS-0662	\$4.45	\$3.95	\$3.45

BNC PCB

- PCB connect with optional panel screw fixing



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-0661	\$7.95	\$6.95	\$6.25

BNC WITH TERMINALS



NEW 2015

↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	Screw Terminal	PA-3715	\$4.95	\$4.45	\$4.00
	Spring Terminal	PA-3716	\$4.95	\$4.45	\$4.00

BNC ADAPTORS



Type	Cat.	Qty 1+	Qty 4+	Qty 10+
BNC Plug to F59 Plug Adaptor	PA-3661	\$4.95	\$4.45	\$3.90
BNC Adaptor 1 Male to 2 Female - T	PA-3662	\$5.95	\$5.25	\$4.75
BNC Adaptor 1 Male to 2 Female - Y	PA-3664	\$9.95	\$8.75	\$7.75
BNC T Adaptor	PA-3660	\$4.95	\$4.45	\$3.90
BNC Male to Double Binding Sockets/Banana Sockets	PA-3666	\$8.95	\$7.95	\$6.95
BNC Plug to BNC Plug Adaptor	PA-3665	\$4.95	\$4.45	\$3.90
BNC Plug to F-81 Socket	PA-3651	\$1.95	\$1.75	\$1.55
BNC Plug to RCA Socket	PA-3654	\$3.95	\$3.45	\$3.15
PL259 Plug to BNC Socket	PA-3652	\$6.95	\$6.25	\$5.50
PL259 Socket to BNC Plug	PA-0681	\$3.95	\$3.45	\$3.15
BNC Plug to BNC Socket R/A	PA-3663	\$4.95	\$4.45	\$3.90

SPEAKER CABLE

Light Duty Figure 8 14/0.14mm OFC

100 metre roll

Ideal for Hi-Fi systems, intercoms, etc. Grey with black trace.

Conductor diameter	0.51mm x 2	Stranding	(14 x 0.14mm OFC) x 2
Conductor mm ²	0.215mm ² x 2	Insulation	PVC
AWG	24 x 2	Dimensions	1.8mm x 3.6mm
⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1702	\$0.50	\$40.00	\$35.00

Regular Duty Figure 8 14/0.20mm OFC

100 metre roll

Clear with white trace.

Conductor diameter	0.74mm x 2	Stranding	(14 x 0.2mm OFC) x 2
Conductor mm ²	0.44mm ² x 2	Insulation	PVC
AWG	21 x 2	Dimensions	2mm x 4mm
⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1704	\$0.70	\$55.00	\$45.00

Medium Duty Figure 8 19/0.18mm OFC

100 metre roll

Suited to amplifiers up to 150 watts. 19 x 0.18mm. Black with white trace.

Conductor diameter	0.8mm x 2	Stranding	(19 x 0.18mm OFC) x 2
Conductor mm ²	0.483mm ² x 2	Insulation	PVC
AWG	20 x 2	Dimensions	2.6mm x 5.2mm
⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1706	\$0.80	\$67.00	\$60.00

Heavy Duty Figure 8 24/0.20mm OFC

100 metre roll

Suited for speaker systems above 150 watts. 24/0.2mm. Clear with black trace.

Conductor diameter	0.97mm x 2	Stranding	(24 x 0.2mm OFC) x 2
Conductor mm ²	0.75mm ² x 2	Insulation	PVC
AWG	18/19 x 2	Dimensions	2.8mm x 5.6mm
⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1708	\$0.90	\$70.00	\$60.00

Extra Heavy Duty Figure 8 41/0.20mm OFC

100 metre roll

Clear with white trace.

Conductor diameter	1.29mm x 2	Stranding	(41 x 0.2mm OFC) x 2
Conductor mm ²	1.288mm ² x 2	Insulation	PVC
AWG	16 x 2	Dimensions	3.2mm x 6.4mm
⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1710	\$1.75	\$150.00	\$105.00

Extra Heavy Duty Figure 8 79/0.20mm OFC

100 metre roll

Exactly half the wire content of the Jumbo cable but still 3 times thicker than the heavy duty cable. Clear with white trace.

Conductor diameter	1.8mm x 2	Stranding	(79 x 0.2mm OFC) x 2
Conductor mm ²	2.5mm ² x 2	Insulation	PVC
AWG	13 x 2	Dimensions	4.0mm x 8.0mm
⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1712	\$2.50	\$205.00	\$160.00

Jumbo Speaker Cable - 259/0.12mm OFC

100 metre roll

For those who want top quality jumbo speaker cable. Figure 8, 259/0.12mm strands in each side. Clear with blue trace.

Conductor diameter	1.92mm x 2	Stranding	(259 x 0.12mm OFC) x 2
Conductor mm ²	2.93mm ² x 2	Insulation	PVC
AWG	12/13 x 2	Dimensions	4mm x 8mm

⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1732	\$4.10	\$340.00	\$295.00

Flat Jumbo Speaker Cable - 203/0.12mm OFC

100 metre roll

Ideal for car stereo or home wiring under the carpet. Clear with white trace.

Conductor diameter	1.7mm x 2	Stranding	(203 x 0.12mm OFC) x 2
Conductor mm ²	2.3mm ² x 2	Insulation	PVC
AWG	13/14 x 2	Dimensions	12.5mm x 8.5mm

⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1740	\$3.50	\$285.00	\$235.00

Pro Audio Speaker Cable

100 metre roll

Super flexible speaker cable. Separate colour-coded 18AWG red and black conductors in a single outer sheath. Conductors: 41 x 0.16 OFC. Jacket OD: 6mm



AWG 18

⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1754	\$1.70	\$140.00	\$110.00

Core Pro Audio Speaker Cable

100 metre roll

Super flexible for stage and professional applications. Four core OFC colour coded conductors. Conductors: 40 x 0.16mm OFC. Jacket OD: 7.5mm



AWG 18

⬆ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1762	\$3.40	\$280.00	\$215.00

SMALL ROLLS SPEAKER CABLE

Light Duty Figure 8

30 metre roll

14/0.14mm Figure 8. Grey with black trace.

AWG 24 x 2



⬆ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-1703	\$12.95	\$11.35	\$9.65

Heavy Duty Figure 8

30 metre roll

24/0.20mm Figure 8 clear with black trace.

AWG 18 x 2



⬆ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-1709	\$25.95	\$23.45	\$20.75

Extra Heavy Duty Figure 8

30 metre roll

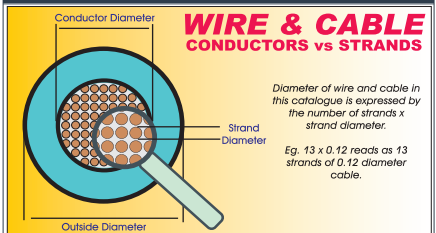
79/0.2mm. figure 8. Clear with white trace.

AWG 13 x 2



⬆ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-1713	\$74.95	\$67.45	\$59.95

TECH TALK!



SCREENED AUDIO & VIDEO CABLE

Figure 8 Twin Screened

100 metre roll

Twin grey PVC covered individually screened conductors. Screens electrically separated.



Conductor Dia.	0.32mm x 2	Stranding	28 x 0.12mm
Conductor mm ²	0.08mm ² x 2	Insulation	PVC
AWG	28 x 2	Resistance (20 °C)	0.2245 ohm/m
Max Temp.	70 °C	Dimensions.	2.8mm x 5.6mm

(PVC + 7 x 0.12mm OFC) x 2

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1502	\$1.00	\$85.00	\$65.00

Single Screened Audio

100 metre roll

Single screened grey PVC covered, light duty cable. Ideal for patch cords, small microphones, amplifier wiring, etc.



Conductor Dia.	0.32mm x 2	Stranding	28 x 0.12mm
Conductor mm ²	0.08mm ² x 2	Insulation	PVC
AWG	28 x 2	Resistance (20 °C)	0.2245 ohm/m
Max Temp.	70 °C	Overall dia.	3mm

(PVC + 7 x 0.12mm OFC)

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1500	\$0.55	\$45.00	\$35.00

Single Core OFC Screened

100 metre roll

High quality OFC mono audio cable, double screened for extra shielding. Ideal for making your own RCA leads.



Conductor/Insul:	OFC/PPE	Impedance:	65Ω@1m
Braid:	96/0.10 + Alum	Stranding:	45/0.12mm
Capacitance:	66.8pF/m	Conductor Resis:	0.0365 ohm/m
AWG	22		

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1508	\$2.35	\$195.00	\$170.00

2 Core Round

100 metre roll

Twin screened pair (not balanced). Enclosed in a thick wall PVC jacket. 0.127/7 + 0.12/40



Conductor Dia.	0.32mm x 2	Stranding	40 x 0.12mm
Conductor mm ²	0.08mm ² x 2	Insulation	PVC
AWG	28 x 2	Resistance (20 °C)	0.002245 ohm/m
Max Temp.	70 °C	Overall dia.	3.5mm

(PVC + 7 x 0.12mm OFC) x 2

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1504	\$0.90	\$67.00	\$55.00

4 Core Round

100 metre roll

4 conductors each screened and encased in one PVC covering. Ideal for DIN plug and socket wiring. Screens electrically common to all conductors



Conductor Dia.	0.32mm x 4	Stranding	28 x 0.12mm
Conductor mm ²	0.08mm ² x 4	Insulation	PVC
AWG	28 x 4	Resistance (20 °C)	0.2245 ohm/m
Max Temp.	70 °C	Overall dia.	4.5mm

(PVC + 7 x 0.12mm OFC) x 4

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1510	\$1.30	\$105.00	\$80.00

Figure 8 OFC Screened Audio

40 metre roll

High quality audio cable. As used on our best leads.



Inner conductor:	0.12mm OFC	Screen:	14mm aluminium foil longitudinal wrapped shield
Braid:	0.12mm/6 x 16	Outer	6mm / FPE
AWG	23	dia/Insulator:	Red & White

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1506	\$3.95	\$129.00	\$109.00

Figure 8 OFC Double Screened + Central Lead Wire

100 metre roll

Ideal for running audio line level cables from one end of the car to the other. The double screens just about eliminate all interference. The central lead wire is used to remotely turn amplifiers on.



Size	12 x 5mm	Braid:	16 x 6/0.12mm
Conductor / Ins:	OFC/PPE	Cond Resis:	0.0366 ohm/m@20°C
Stranding:	45/0.12mm	Capciance:	67.0pF/m
AWG	20	Colour	Red

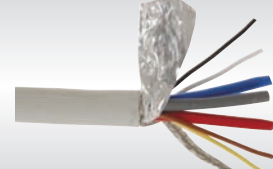
Impedance: 65Ω @ 1MHz.

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1509	\$3.30	\$260.00	\$230.00

Professional VGA Cable

30 metre roll

VGA cable suitable for installations of projectors, TVs or monitors in AV rooms, computer, conference or training rooms etc. Intended to be used with VGA Wall Plate Cat. PT-0476.



RGB Conductors:	7 x 0.127mm	Sync / other conductors:	7 x 0.2mm
Center Conductor:	tinned copper	Jacket:	1.1mm PVC
Dielectric:	1.60mm foam PE	Shielding:	30 x 0.03mm
Braiding:	40x0.12mm	Screen:	Al foil
Jacket:	2.5mm PVC	Drain:	7 x 0.2mm
			tinned copper

Braiding:	92 x 0.12mm tinned copper
Jacket:	7.8mm PVC UL94 VW-1
AWG	28

↑ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-1572	\$89.95	\$80.95	\$71.95

Professional RGB Video Cable

50 metre roll

This is a RGB video cable with 3 screened cables for red, green and blue video. Inside cable insulation is colour coded and suitable for video signals. Each cable is 6mm diameter. Individual conductors can be split and used for individual composite video signals if required.



Inner Cond:	0.12mm OFC	Insulator:	3.1mm FPE coloured
Screen:	14mm alumin foil	Braid:	0.12mm/6 x 16 tinned OFC
Jacket:	PVC 6 x 18mm	Capacitance:	85 pF/m between conductor & screen
AWG	23		

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1559	\$5.15	\$215.00	\$180.00

Professional S-Video

100 metre roll

High Quality cable for video. S-Video uses 4 pin mini DIN plugs. This is the same cable as used in our S-Video video cables. Ideal for home cinema.



Insulator:	1.5mm FPE white	Screen:	0.1mm x 46 OFC spiral
Outer Jacket:	PVC 6.5 dia non migration	Capacitance:	85 pF/m between conductor and shield
Inner conduct:	0.12mm x 7 OFC	AWG	28

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1556	\$1.75	\$140.00	\$120.00

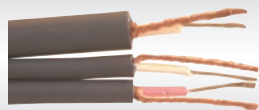
AV SIGNAL & RF COAXIAL CABLES

SCREENED AUDIO & VIDEO CABLE (CONTINUED)

Professional Audio & Video

50 metre roll

Triple cable, 2 for audio and the thicker one for video. It is the same cable that's used in our 3 RCA to 3 RCA pre-made cables. 2 Audio Cables.



Two Audio Cables

Inner con: 20 x 0.12mm OFC
Insulator: 1.6mm FPE Red/White
Screen: 40 x 0.12mm OFC
Jacket: PVC 3.6mm dia non migration

Video Cable

Inner con: 24 x 0.12mm OFC
Insulator: 2.5mm FPE White
Screen: 4 x 16 x 0.12mm OFC
Jacket: PVC 6mm dia non migration

AWG 24

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1554	\$3.50	\$130.00	\$105.00

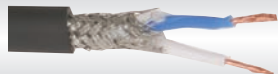
PROFESSIONAL MICROPHONE CABLE

The best quality microphone cable for all P.A. and stage use. • Flexible black matt finish PVC low noise cable with tinned copper screening.

2 Core Screened

100 metre roll

High quality mic cable for P.A. stage or semi professional use. 60/0.08 x 2 core. Conductive PE insulation on conductors provides improved shielding. Cotton filled and tissue wrapped. Braided Shield: 16 x 9/0.10 tinned copper (144/0.10). Outer Jacket 6.0mm diameter



AWG 18

RESPONSE

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1530	\$2.50	\$205.00	\$160.00

4 Core Screened

100 metre roll

Conductors: 26/0.10 x 4. Conductive PE insulation on conductors provides improved shielding. cotton filled and tissue wrapped. Braided shield: 16 x 8/0.10 tinned copper (128/0.10). Outer Jacket 6.0mm diameter



AWG 22

RESPONSE

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1540	\$2.70	\$215.00	\$185.00

75 OHM COAXIAL TELEVISION CABLE

SEE CCTV CABLE WB-2017 ON PAGE 209.

Belden Brand 75 Ohm Domestic TV Coax

152 metre roll

This is RG59 with an OD of 6mm. Belden No. 9275.



Inductance .097uH / 300mm
Capacitance 16.2pF / 300mm
Attenuation 100MHz - 2.6dB / 30m, 300MHz - 4.45dB / 30m, 600MHz - 6.20dB / 30m.

Belden

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-2002	\$1.00	\$125.00	\$99.00

75 Ohm RG59 Gas Injected Foam Coax

100 metre roll

New generation TV Coax. Both a braid & foil, provides 100% screening.



Won't get water logged underground.
Black in colour.
Outside diameter 6mm.

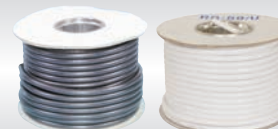
↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-2004	\$0.70	\$55.00	\$45.00

75 Ohm RG59 Gas Injected Foam Coax

30 metre roll

A 30m roll is generally a common length for a domestic TV antenna installation.

Save over buying by the metre, and a small roll is easy to work with.
Black WB-2005
White WB-2001

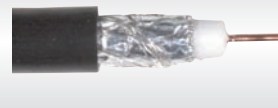


↑ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-2005	\$19.95	\$17.95	\$16.20
WB-2001	\$21.95	\$19.75	\$17.75

RG6 Quad Shield 75 Ohm Coax

100 metre roll

Features a solid 18AWG copper clad steel centre conductor, gas injected foam dielectric and four separate shielding layers to eliminate any outside interference.



Centre Conductor: 18AWG copper clad steel
Core O.D: 4.57mm
Jacket O.D: 7.7mm
AUSTAR approval: A00458
Foxtel approval #: F 30440
First shielding: Bonded aluminium polyester tape
Second shielding: tinned annealed copper
Nom. Impedance: 75Ω
TELSTRA approval: 014857
OPTUS approval #: SAP4868

NOTE
Foxtel Approved

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-2006	\$1.20	\$80.00	\$65.00

Belden Brand Quad Shield RG6 75 Ohm Coax

100 metre roll

Used by Pay-TV installers. Quality U.S made Belden brand. We have repackaged in Australia on 100m reels. Normally this is only available in 1000 feet boxes. It features a solid 18AWG steel centre conductor, copper plated, gas injected polyethylene foam insulation (to keep water out), Black PVC jacket, plus 4 layers of screening: a combination of aluminium foils and braiding. 100% sweep tested 5MHz-1GHz.



Belden part: 1189A
Centre conduct: 18AWG steel Cu plated 1.016 dia
Core O.D: 4.572mm
Austar / Foxtel approval #: F 30456
Jacket O.D: 7.569mm
Vel. of prop: 82%, 53.1pF/m
Nom. Capacit: 16.2pF/ft

Nom. Imped: 75Ω

NOTE
Foxtel Approved

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-2009	\$1.80	\$100.00	\$85.00

Belden Brand Quad Shield RG6 75 Ohm Coax

30 metre roll

30m roll of the WB-2009 Belden Coax shown above.



AWG 18
Austar / Foxtel approval #: F 30456

NOTE
Foxtel Approved

TECH TALK!

We do not sell cheap 3C-2V type TV coax. It's screening is inadequate for acceptable performance IN TODAY'S DIGITAL TV ENVIRONMENT

↑ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-2014	\$44.95	\$40.45	\$34.50

COMMUNICATION & TELEPHONE CABLE

50 Ohm RG58 C/U Networking

100 metre roll

As used for computer networking.



Conductors: 19/0.18 + 112/0.12mm.
AWG 23
OD 5mm

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-2012	\$1.95	\$165.00	\$135.00

50 Ohm RG58/U

100 metre roll

Suited up to 500MHz.



Ideal for CB, marine, amateur and two-way radio.
AWG 23

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-2010	\$1.45	\$120.00	\$100.00

50 Ohm RG213/U

100 metre roll

Communication cable commonly used in UHF.



Conductors: 7/0.75 + 216/0.12mm
AWG 23

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-2015	\$4.25	\$315.00	\$254.00

2 Pair (4 Wire)

100 metre roll

Flat cable. Ivory colour, 4 x 7 x 0.12mm



AWG 28



↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1620	\$0.60	\$45.00	\$35.00

3 Pair (6 Wire)

100 metre roll

Flat cable. Ivory colour, 6 x 7 x 0.12mm



AWG 28



↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1622	\$0.80	\$55.00	\$45.00

INTERCOM / ALARM / CCTV CABLE

Bell Wire

100 metre roll

Ideal for doorbells, intercoms, or anywhere where a really thin figure 8 cable is required. 7/0.10mm x 2



AWG 30

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1700	\$0.20	\$15.00	\$12.00

Alarm Cable - 30m Roll

30 metre roll

7 x 0.16mm
4 core
AWG: 25



↑ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-1591	\$22.95	\$20.35	\$17.50

Alarm - 4 Core

100 metre roll

Flexible stranded conductors, 7 x 0.16 in tough outer sheath.



AWG 25

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1590	\$0.80	\$65.00	\$45.00

Alarm Cable 30m Roll A-Tick Approved

30 metre roll

Austel approved. For use in alarms with diallers. 6 x 7/0.2 flexible stranded conductors in tough outer sheath.

AWG: 24
ACMA Approved



↑ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-1596	\$34.95	\$31.45	\$27.95

Alarm - 6 Core A-Tick Approved

100 metre roll

Austel approved alarm cable. Use with alarms that have diallers. 7/0.2 x 6 flexible stranded conductors in tough outer sheath. OD 5.1mm. Colour white



AWG 24
ACMA Approved

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-1598	\$1.15	\$90.00	\$75.00

RG59 / Power Cable

100 metre roll

Combines RG59 coax cable and 16G power cable. Ideal for CCTV and surveillance applications.



OD: 10 x 7.5mm
Colour: Black
AWG: 24

↑ Cat.	Per Metre	1+ Rolls	5+ Rolls
WB-2017	\$1.40	\$110.00	\$95.00

COMPUTER / DATA CABLE

50 Ohm RG174U Coax Cable

20 metre roll

Handy 20m length of unterminated RG174/U cable as commonly used in Wi-Fi and amateur radio installations.



Impedance: 50 ohm
Insulation: Polyethylene (PE)
AWG 28
Tinned copper braid.
RG174/U

↑ Cat.	1+ Rolls	4+ Rolls	10+ Rolls
WB-2018	\$21.95	\$19.95	\$17.55

LET'S FIND EVERYTHING YOU NEED!

FROM
\$11.95
TH-1897



CUTTERS

P131

FROM
\$1.45
WH-5530



HEATSHRINK

P214

FROM
\$19.95
TH-1820



COAX STRIPPER

P135

FROM
\$19.95
TH-1935



CRIMP TOOLS

P134

FROM
\$2.45
HP-0680



CABLE CLIPS

P220

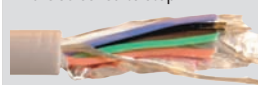
DATA & AC POWER CABLE

COMPUTER / DATA CABLE (CONTINUED)

Computer

100 metre roll

All are screened to stop RFI.



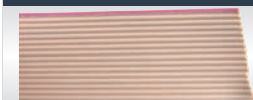
6 Way 7/0.12 x 6C + foil + 7/0.16 OD 5mm
9 Way 7/0.12 x 9C + foil + 7/0.16 OD 5mm

AWG 28

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
6 Way	WB-1575	\$1.65	\$130.00	\$115.00
9 Way	WB-1578	\$1.90	\$150.00	\$130.00

IDC Ribbon

33 metre roll



Designed for IDC connectors. Grey in colour with red trace.

AWG 28

Pitch 1.27mm (0.05")
Strands 7/0.127mm

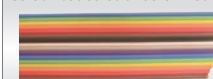


↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
16 Way	WM-4502	\$1.85	\$48.00	\$41.00
26 Way	WM-4504	\$2.65	\$69.00	\$59.00
50 Way	WM-4508	\$5.10	\$140.00	\$119.00

Rainbow Cable 16 Core

33 metre roll

Colour coded strands of insulated conductor bonded together in a flat cable. Ideal for rewiring looms, can be split and each individual wire used.



Same rating as 13 x 0.12mm light duty hook-up wire.

AWG 28

Pitch 1.27mm (0.05")
Strands 7/0.127mm



↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
	WM-4516	\$3.50	\$95.00	\$79.00

Cat 5e 8 Core Stranded Network

100 metre roll

An ACMA approved high quality cable for patch leads and short runs.



Consists of 4 twisted pairs, each conductor 7/0.20mm copper wire, polypropylene insulated with a tough ivory colour PVC jacket. 100MHz.

AWG 24



ACMA Approved

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
	WB-2020	\$1.35	\$110.00	\$80.00

Cat 5e Solid Network

100 metre roll

Single strand Cat 5e, used for long runs in permanent installations.



A Tick approved. Blue in colour. 100MHz.

AWG 24



ACMA Approved

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
	WB-2022	\$1.35	\$110.00	\$80.00

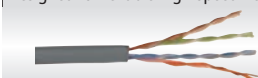
POLYWRAPPED ROLL 30 METRE PACK - NO ROLL

↑	Cat.	1+ Rolls	4+ Rolls	10+ Rolls
	WB-2023	\$39.95	\$35.95	\$31.95

Cat 6 Solid Core UTP Network

100 metre roll

Designed for reliable high-speed network installations. Suitable for IDC terminations on patch panels and wall plates



4 x 23 AWG solid core twisted pairs
PVC spline

AWG 23



ACMA Approved

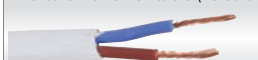
↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
	WB-2030	\$1.65	\$140.00	\$110.00

AC MAINS CABLE

Two Core Mains Flex

100 metre roll

Two-core mains flex cable (no earth) with a white outer PVC jacket. Suitable for general 240V work not requiring an earth.



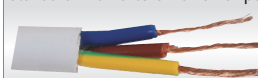
Conductor Area 0.75mm² x 2
Current 7.5A
Safety Approval Number: Q080451

↑	Current	Approvals	Cat.	Per Metre	1+ Rolls	5+ Rolls
	7.5A	Q080451	WB-1560	\$1.10	\$90.00	\$80.00

Three Core Mains Flex

100 metre roll

Standard 240V 3 core mains flex power cable with a white outer PVC jacket. Suitable for extension cables and general 240V work where an earth is required.



Conductor Area 1.0mm² x 3
Current 10A
Safety Approval Number: Q080451

↑	Current	Approvals	Cat.	Per Metre	1+ Rolls	5+ Rolls
	10A	Q080451	WB-1562	\$2.50	\$200.00	\$175.00

Twin & Earth Wiring - Lighting

100 metre roll

Twin & Earth Flat Cable



Conductor Area 1.0mm² x 2 + E
Current 10A (Lights)
Stranding 1/1.13mm

↑	Current	Cat.	Per Metre	1+ Rolls	5+ Rolls
	10.5A	WB-1565	\$1.35	\$110.00	\$80.00

Twin & Earth Wiring - Power

100 metre roll

Twin & Earth Flat Cable



Conductor Area 2.5mm² x 2 + E
Current 20A
Stranding 7/0.67

↑	Current	Cat.	Per Metre	1+ Rolls	5+ Rolls
	20A	WB-1568	\$2.40	\$195.00	\$175.00

LET'S FIND EVERYTHING YOU NEED!

FROM

\$7.95

PP-1436



MODULAR CONNECTORS P201

FROM

\$1.65

PS-0984



IDC SOCKETS P186

FROM

\$3.95

PS-4051



LIGHT SWITCHES P340

FROM

\$9.95

HM-3192



BP CONNECTORS P340

FROM

\$4.95

PS-4040



GPOs P340

GENERAL PURPOSE POWER CABLE

Flexible Light Duty

100 metre roll

13 x 0.12mm. Suited for all general purpose wiring. 8 different colours available. PVC insulation.

Red	Cat. WH-3010	Black	Cat. WH-3011
Brown	Cat. WH-3012	Orange	Cat. WH-3013
Yellow	Cat. WH-3014	Green	Cat. WH-3015
Blue	Cat. WH-3016	White	Cat. WH-3017

Rated Current	0.6A	Stranding	13 x 0.12mmTC
Conductor Dia.	0.42mm	Overall Dia.	1.8mm
Conductor mm ²	0.147mm ²	AWG	25

↑	Per Metre	1+ Rolls	5+ Rolls
All Types	\$0.25	\$15.00	\$12.00

Heavy Duty

100 metre roll

24 x 0.2mm. Suitable for 250V wiring and general heavy duty work. PVC insulation.

Red	Cat. WH-3040	Black	Cat. WH-3041
Green	Cat. WH-3042		

Rated Current	7.5A	Stranding	24 x 0.2mm
Conductor Dia.	0.97mm	Overall Dia.	2.4mm
Conductor mm ²	0.75mm ²	AWG	18/19

↑	Per Metre	1+ Rolls	5+ Rolls
All Types	\$0.50	\$40.00	\$30.00

Extra Heavy Duty

100 metre roll

32 x 0.2mm. Suitable for 250V wiring and general heavy duty work. PVC insulation.

Brown	Cat. WH-3050	Blue	Cat. WH-3052
-------	--------------	------	--------------

Rated Current	10A	Stranding	32 x 0.2mm
Conductor Dia.	1.15mm	Overall Dia.	2.8mm
Conductor mm ²	1mm ²	AWG	17

↑	Per Metre	1+ Rolls	5+ Rolls
All Types	\$0.70	\$60.00	\$45.00

SOLAR SYSTEM CABLE

UV Stabilised Solar Power Cable

100 metre roll

Very tough cable, specifically for the rigours of outdoor use in solar panel installations. Dust, age and UV resistant, tinned copper conductors to minimise corrosion. Use with our PV connectors for complete environmental protection.



Two types available:	WH-3121 WH-3122	Conductor Area	4mm ² 6mm ²	Rated current	58A 76A
Conductor material:	Tin plate copper, Class 5				
Insulation material:	XLPO				
Rated voltage:	1000VDC				
Temperature range:	-40 to -125°C				
TUV certification:	2 PfG 1161/01.06				
	IP65 rated				

TÜV CERTIFIED

SEE PAGE 361 FOR SOLAR CONNECTORS

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
	WH-3121	\$4.20	\$354.00	\$319.00
	WH-3122	\$7.20	\$599.00	\$545.00

HOOK-UP CABLE

Flexible Light Duty - Rolls

25 metre roll

Quality 13 x 0.12mm tinned hook-up wire on plastic spools.



Current rating	0.6A	Max temp.	70°C
PVC insulation		AWG	26
Resistance (20°C)	0.1365 ohm/m		
Red	WH-3000	Yellow	WH-3004
Black	WH-3001	Green	WH-3005
Brown	WH-3002	Blue	WH-3006
Orange	WH-3003	White	WH-3007

↑	Cat.	1+ Rolls	4+ Rolls	10+ Rolls
Sold Per Roll		\$4.95	\$4.45	\$3.90

Flexible Light Duty Reel Packs - Pack of 8

25 metre roll

Quality 13 x 0.12mm tinned hook-up wire on plastic spools.



Current rating	0.6A	Max temp.	70°C
PVC insulation		AWG	26
Resistance (20°C)	0.1365 ohm/m		
Stranding		13 x 0.12mmTC	
Overall dia.		1.8mm	

↑	Cat.	1+ Pack	4+ Packs	10+ Packs
Pkt 8	WH-3009	\$34.95	\$31.45	\$28.50

Hook Up Cable Packs

2 metre lengths

2 metres of 8 different colours of 10 x 0.12mm hook-up cable



Lengths:	2 metres	16 metres in all
Qty:	8 pcs	10 x 0.12mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	WH-3025	\$4.95	\$4.45	\$3.90

+

SEE PAGE 135 FOR CABLE STRIPPERS

WIRE WRAP

NICHROME RESISTANCE WIRE

Used for wiring heating elements such as toasters, etc. 80% nickel, 20% chromium. Resistance 13.77 ohm per metre. • Size 28 B&S (0.315mm).



LENGTH 4 METRES

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WW-4040	\$4.95	\$4.45	\$3.90

WIRE WRAP ON SPOOLS

This Kynar wire is high quality silver plated.

- Available in three colours.
- Supplied on a 33 metre reel

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Red	WW-4344	\$15.95	\$14.35	\$12.70
Black	WW-4345	\$15.95	\$14.35	\$12.70
Blue	WW-4346	\$15.95	\$14.35	\$12.70



COPPER WIRE

ENAMELLED COPPER WIRE

This soft copper wire is coated in a high dielectric strength varnish. You can solder through the enamel, but we recommend that you lightly sandpaper the wire ends with 200+ grit paper to ensure good solder adhesion, especially with RoHS type solder.



mm	B&S	Wght	Approx Lm	Cat.	1+ Roll	4+ Rolls	10+ Rolls
0.25	30	25g	33	58	WW-4012	\$6.95	\$6.25
0.315	28	25g	31	40	WW-4013	\$6.95	\$6.25
0.4	26	25g	28	22	WW-4014	\$6.95	\$6.25
0.5	24	100g	25	57	WW-4016	\$10.95	\$9.75
0.63	22	100g	23	36	WW-4018	\$10.95	\$9.75
0.8	20	100g	21	22	WW-4020	\$10.95	\$9.75
1.0	18	100g	19	14	WW-4022	\$10.95	\$9.75
1.25	16	100g	18	9	WW-4024	\$10.95	\$9.75

TINNED COPPER WIRE

Two handy sizes of AWG 22 (0.71mm dia.) for wire links etc.



↑	Weight	Cat.	1+ Rolls	4+ Rolls	10+ Rolls
	25g	WW-4032	\$12.95	\$11.35	\$10.35
	100g	WW-4030	\$29.95	\$26.90	\$23.70

HIGH CURRENT, GENERAL PURPOSE, MARINE & AUTOMOTIVE

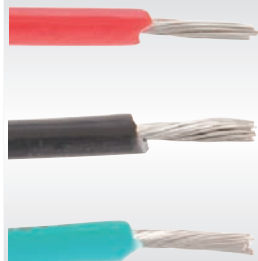
**FOR LIGHT DUTY
HOOK-UP CABLE
SEE PREVIOUS PAGE**

SINGLE CORE CONDUCTORS

7.5 Amp Tinned - Handy Packs

10 metre roll

Flexible heavy duty tinned copper cable suitable for general purpose wiring up to 250V supplied on an easy to use handy pack 10m reel. Suitable for use in marine applications.



Rated Current: 7.5A
Conductor Dia.: 0.97mm
Conductor mm²: 0.75mm²
AWG: 18/19
Stranding: 24 x 0.2mmTC
Insulation: PVC
Resistance (20°C): 0.0237 ohm/m
Overall dia.: 2.4mm

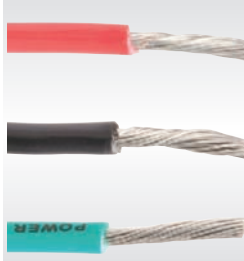


↑ Colour	Cat.	1+ Roll	4+ Rolls	10+ Rolls
Red	WH-3045	\$7.95	\$6.95	\$6.25
Black	WH-3046	\$7.95	\$6.95	\$6.25
Green	WH-3047	\$7.95	\$6.95	\$6.25

15 Amp Tinned - Handy Packs

10 metre roll

Flexible DC tinned copper power cable suitable for general purpose automotive and marine applications. Supplied on an easy to use 10m handy pack reel and available in three colours.



Rated current: 15A
Total diameter: 3.3mm
AWG: 16
Stranding: 26 x 0.3mm
Insulation: PVC
Max temp.: 80°C
Tinned copper cable



↑ Colour	Cat.	1+ Roll	4+ Rolls	10+ Rolls
Red	WH-3054	\$12.95	\$11.35	\$10.35
Black	WH-3055	\$12.95	\$11.35	\$10.35
Green	WH-3056	\$12.95	\$11.35	\$10.35

7.5 Amp Tinned - Heavy Duty Silicone - Handy Packs

10 metre roll

Silicone rubber insulation, very flexible with high temperature rating. Max temperature 180°C.



↑ Colour	Cat.	Qty 1+	Qty 4+	Qty 10+
Red	WH-3035	\$12.95	\$11.35	\$10.35
Black	WH-3037	\$12.95	\$11.35	\$10.35

15 Amp Tinned, by the metre

100 metre roll

Flexible DC tinned copper power cable suitable for general purpose automotive and marine applications.



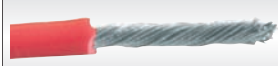
Rated Current 15A
Conductor Dia. 1.5mm
Conductor mm² 1.84mm²
AWG 15
Stranding 26 x 0.3mmTC
Insulation PVC
Resistance (20°C) 0.0108 ohm/m
Overall Dia. 3.2mm

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
Red	WH-3073	\$1.10	\$80.00	\$70.00
Black	WH-3075	\$1.10	\$80.00	\$70.00

25 Amp Tinned, by the metre

100 metre roll

Ideal for most automotive wiring. Tinned for corrosion prevention in marine applications.



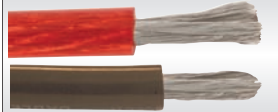
Rated Current 25A
Conductor Dia. 1.9mm
Conductor mm² 2.9mm²
AWG 12
Stranding 41 x 0.3mmTC
Insulation PVC
Resistance (20°C) 0.0059 ohm/m
Overall Dia. 3.5mm

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
Red	WH-3080	\$2.20	\$185.00	\$165.00
Black	WH-3082	\$2.20	\$185.00	\$165.00

56A 8 Gauge OFC High Current

100 metre roll

Good for all but the biggest car amplifiers etc.



Conductor material: OFC
Current capacity: 56A
Total diameter: 6.5mm
AWG 8
Stranding: 7 x 95/0.12mm
Insulation: PVC
Resistance @ 20°C: 0.00252Ω/m
Wire Diameter: 4.05mm

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
Red	WH-3060	\$3.60	\$330.00	\$275.00
Black	WH-3062	\$3.60	\$330.00	\$275.00

110A 4 Gauge OFC Super High Current

50 metre roll

Run from your battery to distribution boxes and then the 8GA to amps etc.



Conductor material: OFC
Current capacity: 110A
Total diameter: 10mm
AWG 4
Stranding: 7 x 7 x 34/0.127mm
Insulation: PVC
Resistance @ 20°C: 0.00097Ω/m

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
Red	WH-3064	\$8.90	\$370.00	\$348.00
Black	WH-3066	\$8.90	\$370.00	\$348.00

160A 2 Gauge OFC Ultra High Current

30 metre roll

Run from your car battery to distribution boxes and then 8GA or 4GA to amps, etc.



Conductor material: OFC
Current capacity: 160A
Total diameter: 12.0mm
Stranding: 145 x 19 / 0.12mm
Insulation material: PVC
Resistance @ 20°C: 0.0007Ω/m

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
Red	WH-3070	\$14.95	\$369.00	\$325.00
Black	WH-3072	\$14.95	\$369.00	\$325.00

What does "OFC" mean? It means OXYGEN FREE COPPER. It's a purer form of copper metal.

HIGH CURRENT, GENERAL PURPOSE, MARINE & AUTOMOTIVE

SINGLE CORE CONDUCTORS (CONTINUED)

200A 0 Gauge OFC Ultra High Current

25 metre roll

Run from your battery to distribution blocks and then 2GA, 4GA or 8GA to your amplifiers or other power equipment for seriously high current applications.



Conductor material:	OFC	Stranding:	7 x 7 x 81 / 0.12mm
Current capacity:	200A	Insulation material:	PVC
Total diameter:	15mm	Resistance @ 20°C:	350 micro ohms/m

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
Red	WH-3092	\$21.95	\$489.00	\$395.00
Black	WH-3094	\$21.95	\$489.00	\$395.00

2 CORE CONDUCTORS

7.5 Amp 2 Core Tinned DC Power Cable - by metre & 10m or 30m Roll

100 metre roll

Double insulated 2 core power cable suitable for automotive and boating applications. Tinned copper cable suitable for use in marine applications. Sold by the metre or 10m handy pack or 30m roll pack.



Rated Current	7.5A	Stranding	24 x 0.2mm
Conductor dia	1.9mm	Insulation	PVC
Conductor mm ²	0.75mm ² x 2	Max temp.	80 °C
AWG	18	Dimensions	5(W)mm x 3.2(H)mm

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
100m	WH-3057	\$1.20	\$90.00	\$80.00
↑	Cat.	Qty 1+	Qty 4+	Qty 10+
10m	WH-3049	\$12.95	\$11.35	\$10.35
30m	WH-3053	\$32.95	\$29.45	\$26.50

15 Amp Tinned, by the metre & 30m Roll

100 metre roll

Double insulated 2 core tinned power cable suitable for automotive and marine applications (PVC + 48 x 0.2mmTC) x 2. WH-3077 is 30m roll pack of WH-3079



Rated Current	15A	Stranding	(48 x 0.2mmTC) x 2
Conductor dia	1.45mm x 2	Insulation	PVC
Conductor mm ²	1.5mm ² x 2	Resistance (20 °C)	0.0123 ohm/m
AWG	16	Dimensions	4.5mm x 7.2mm

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
100m	WH-3079	\$2.60	\$220.00	\$200.00
↑	Cat.	Qty 1+	Qty 4+	Qty 10+
30m	WH-3077	\$69.95	\$62.95	\$55.95

25 Amp Figure-8 DC Auto Power Cable, by the metre

100 metre roll

Ideal for most automotive, marine, or general purpose wiring. Twin core for positive and negative connections. Tinned copper conductors.



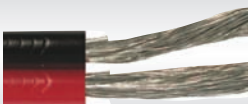
Outside Dia	3.5mm	Stranding	41/0.30mm (per conductor)
Conductor mm ²	2.90mm ²	Insulation	PVC

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
	WH-3087	\$3.80	\$340.00	\$295.00

56 Amp Tinned, by the metre

50 metre roll

For higher current applications where twin core cabling is required. Red & black colour for easy identification.



Rated Current	56A	Stranding	(7 x 101 x 0.12mmTC) x 2
Conductor dia	3.2mm x 2	Insulation	PVC
Conductor mm ²	8mm ² x 2	Resistance (20 °C)	0.0024 ohm/m
AWG	8	Dimensions	6.7mm x 13.6mm

↑	Cat.	Per Metre	1+ Rolls	5+ Rolls
	WH-3063	\$8.00	\$359.00	\$299.00

TRAILER CABLE

Trailer Cable - 10m Roll

10 metre roll

A 10 metre length of standard 5 or 7 conductors sheathed in a tough black PVC jacket. See page 213, 240 or website for the conductor colours and a range of trailer plugs.



	WH-3091	WH-3090
Rated Current:	5A per conductor	5A per conductor
Cores:	5	7
Total diameter:	6.3mm	8.2mm

↑	Cat.	1+ Rolls	4+ Rolls	10+ Rolls
5 Core	WH-3091	\$29.95	\$26.95	\$23.95
7 Core	WH-3090	\$39.95	\$35.95	\$31.95

LET'S FIND EVERYTHING YOU NEED!

FROM
\$7.95
WH-5525



HEATSHRINK

P215

FROM
\$16.95
TH-1824



WIRE STRIPPERS

P135

FROM
\$0.95
HM-3193



TERMINAL BLOCKS

P183

FROM
\$7.95
PP-2052



TRAILER PLUGS

P240

HEATSHRINK

HEATSHRINK TUBING - 5M ROLL - 2:1

Purchase as a 5m box that can be neatly stacked and organised in the workshop or tradesman's van. Shrink with a heatgun, hairdryer or gas burner.

- 2:1 ratio

Specifications	
Material	Polyethylene
Shrink Ratio	2:1
Operating temperature	-55 to 125°C
Shrink temperature	Start at 70°C and full recovery at 110°C
Flammability	VW-1
Approvals	RoHS and UL224
Colour	Black & Red
Roll length	5m
Box dimensions	49(W) x 177(H) x 165(D)mm



Supplied in handy box



Supplied in handy box



↑ Dia (mm)	Shrinks to (mm)	Black	Red	Per 5m Roll
1.5	0.75	WH-5680	WH-5690	\$4.90
2.5	1.25	WH-5681	WH-5691	\$5.75
3.0	1.5	WH-5682	WH-5692	\$6.25
5.0	2.5	WH-5683	WH-5693	\$8.25
10.0	5	WH-5684	WH-5694	\$9.75
16.0	8	WH-5685	WH-5695	\$13.45
20.0	10	WH-5686	WH-5696	\$19.75

2:1 Shrink Ratio
Halogen Free

Sold by the 5m box

HEATSHRINK TUBING - 1.2M LENGTHS - 2:1

Our heatshrink is flexible and made from flame-resistant polyolefin.

- Made to UL224 E180908 125°C.
- Shrinks to 50% of its size.
- Shrink with a heatgun, hairdryer or a gas burner, match etc.
- Length is 1.2 metres.



* Clear heatshrink not halogen free.

↑ Dia (mm)	Shrink to (mm)	Green	Black	Red	Clear	Blue	White	Yellow	Qty 1+	Qty 4+	Qty 10+
1.5	0.75	WH-5510	WH-5530	WH-5540	WH-5550*	WH-5560	WH-5570	WH-5590	\$1.45	\$1.30	\$1.15
2.5	1.25	WH-5511	WH-5531	WH-5541	WH-5551*	WH-5561	WH-5571	WH-5591	\$1.65	\$1.45	\$1.30
3.0	1.5	WH-5512	WH-5532	WH-5542	WH-5552*	WH-5562	WH-5572	WH-5592	\$1.85	\$1.65	\$1.45
5.0	2	WH-5513	WH-5533	WH-5543	WH-5553*	WH-5563	WH-5573	WH-5593	\$1.95	\$1.75	\$1.55
6.0	3	WH-5514	WH-5534	WH-5544	WH-5554*	WH-5564	WH-5574	WH-5594	\$2.25	\$1.95	\$1.80
10	5	WH-5515	WH-5535	WH-5545	WH-5555*	WH-5565	WH-5575	WH-5595	\$2.95	\$2.60	\$2.30
16	8	WH-5516	WH-5536	WH-5546	WH-5556*	WH-5566	WH-5576	WH-5596	\$3.95	\$3.45	\$3.15
20	10	WH-5517	WH-5537	WH-5547	WH-5557*	WH-5567	WH-5577	WH-5597	\$5.75	\$4.95	\$4.60

2:1 Shrink Ratio
Halogen FreeAll Sizes
1.2 Metre Lengths

HEATSHRINK TUBING WITH GLUE LINING 4:1

The heat sensitive glue on the internal wall of the tube melts when heat is applied, allowing for a professional water and dust resistant seal.

- Black in colour and sold in 1.2m lengths
- 4:1 shrink ratio.

4:1 Shrink Ratio
Halogen Free

↑ Size (mm)	Shrinks to (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
4	1	WH-5640	\$4.95	\$4.45	\$3.90
6	1.5	WH-5641	\$5.65	\$4.95	\$4.45
8	2	WH-5642	\$6.45	\$5.75	\$4.95
12	3	WH-5643	\$7.45	\$6.50	\$5.75
16	4	WH-5644	\$7.95	\$6.95	\$6.25
19	4.75	WH-5645	\$11.95	\$10.70	\$9.50
24	6	WH-5646	\$12.95	\$11.35	\$10.35

161 PIECE HEATSHRINK PACK WITH GAS POWERED HEAT BLOWER

A great addition to your workshop or toolbox. The handy box includes an assortment of 160 heatshrink tubes in 7 different colours and diameters, plus 1 gas powered heat gun with Piezo ignition and flame or flameless output. All supplied in a transparent lightweight box that measures 242(L) x 175(W) x 30(H)mm. Use NA-1020 Butane Gas.

NEW
2015

Size	Colour
15mm x 500mm	Black
1.5mm x 100mm	Green 10pcs, red 10pcs, yellow 10pcs, blue 10pcs, white 10pcs, transparent 10pcs
2.5mm x 100mm	Green 6pcs, red 6pcs, yellow 6pcs, blue 6pcs, white 5pcs, transparent 6pcs
3.5mm x 100mm	Green 4pcs, red 4pcs, yellow 4pcs, blue 4pcs, white 4pcs, transparent 5pcs
5mm x 100mm	Green 3pcs, red 4pcs, yellow 3pcs, blue 3pcs, white 3pcs, transparent 4pcs
6mm x 100mm	Green 1pcs, red 2pcs, yellow 2pcs, blue 2pcs, white 1pcs, transparent 2pcs
10mm x 100mm	Green 1pcs, red 2pcs, yellow 2pcs, blue 2pcs, white 1pcs, transparent 2pcs

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Heatshrink Pack	TH-1620	\$39.95	\$35.90	\$31.90

HEAT SHRINKABLE BRAIDED SLEEVING

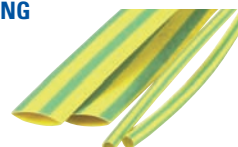
Used to provide added protection to cables against flames and abrasion. Consists of polyester multifilament and special modified polyolefin filament, which will shrink when exposed to a heat source (Heat gun recommended). The unique woven construction makes it extremely flexible and easy to install on the hoses with irregular shapes.

Specifications	
Operating range	-40°C to 125°C
Minimum shrink temperature	80°C
Minimum fully recovery temperature	120°C
Flammability	self-extinguishing
Shrinking ratio	2:1
Approved	RoHS, Halogen Free
Shrink ratio	2:1
Length	1.2m

↑ Size (mm)	Shrinks to (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
10	5	WH-5620	\$3.95	\$3.45	\$3.15
20	10	WH-5622	\$4.95	\$4.45	\$3.90
25	12.5	WH-5624	\$6.30	\$5.50	\$4.95
30	15	WH-5626	\$6.95	\$6.25	\$5.50

YELLOW & GREEN HEATSHRINK TUBING

- 1.2m lengths
- Ideal for indicating earth connections.

Abrasion Resistant & Flame
Retardant - 2:1 Shrink Ratio

↑ Size (mm)	Shrinks to (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
3	1.5	WH-5610	\$2.95	\$2.60	\$2.30
10	5	WH-5612	\$3.95	\$3.45	\$3.15

HEATSHRINK TUBE
50MM BLACK

Ideal for bundling battery packs, but also used for grips on kayak paddles etc. 2:1 shrink rate. Supplied in 300mm lengths.

2:1 Shrink Ratio
Halogen Free

↑ Size (mm)	Shrinks to (mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
50	25	WH-5582	\$3.95	\$3.45	\$3.15

HEATSHRINK PACKS

COMPREHENSIVE HEATSHRINK PACK

- 1 length each of 7 different colours in 7 different sizes ranging from 1.5mm diameter to 20mm.
- Sizes: 1.5, 3, 5, 6, 10, 16 & 20mm.

Note: Clear is NOT halogen Free

2:1 Shrink Ratio
Halogen Free



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5520	\$14.50	\$12.95	\$11.35

HANDY HEATSHRINK PACK

Handy assortment of our high quality heatshrink tubing. Sizes from 1.5mm to 10mm.

- 10 pieces in all of 300 & 150mm length.
- Colour Red & Black

2:1 Shrink Ratio
Halogen Free



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5525	\$7.95	\$6.95	\$6.25

GLUE LINED PRE-CUT HEATSHRINK TUBING - TRADE PACK

A box of six common sizes of 95mm long glue lined heatshrink. Includes 20 pcs 4.0mm, 15pcs 6.0mm, 10pcs 8.0mm, 5pcs 12mm, 5pcs 16mm, & 5pcs 19mm - 60pcs total.

This is an economical way to get this product.

- Supplied in a see-thru nylon snap shut case
- Box measures: 205(W) x 108(D) x 35(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5521	\$29.95	\$26.90	\$23.70

HEATSHRINK ASSORTMENT TRADE PACK

All the heatshrink the technician, tradesman or serious hobby user will ever need. The pack contains 160 lengths of different sizes in a handy storage case.

- 1.5mm: 40 x black, 10 x red, 10 x clear
- 2.5mm: 25 x black, 5 x red, 5 x clear
- 3mm: 17 x black, 4 x red, 4 x clear
- 5mm: 14 x black, 3 x red, 3 x clear
- 6mm: 6 x black, 2 x red, 2 x clear
- 10mm: 6 x black, 2 x red, 2 x clear
- Case size: 205(L) x 110(W) x 35(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5524	\$19.95	\$17.70	\$15.70

CABLE SLEEVING & WRAP

PVC SPAGHETTI TUBING PACK - 12 PIECE

This sleeving is made from soft PVC. It does not shrink with heat. It is ideal for high-voltage protection of smaller wires, has abrasion resistance or you can bundle several smaller wires inside a length.

- 4 sizes - 1.5, 3.0, 5.0 & 10mm.
- Colours - black, red, yellow, white, clear & blue.
- All 300mm long.
- 85°C rated
- Note: colour quantities vary from pack to pack



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WS-5502	\$9.95	\$8.75	\$7.75

VIDAFLEX FIBREGLASS HEAT RESISTANT SLEEVING

A woven fibreglass product used where heat or abrasive resistance is needed for a "spaghetti" type insulation application. Supplied in most commonly used sizes.

- Also sometimes called Cambric insulation
- Thermal resistance to 450°C
- 1 metre per pack



↑	Size (mm)	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	3	1m	WS-5504	\$6.50	\$5.75	\$4.95
	4	1m	WS-5506	\$8.50	\$7.50	\$6.75

EXPANDABLE PPS SLEEVING

This PPS (Polyphenylene Sulphide) monofilament sleeving is ideal in high temperature environments and offers a lightweight mechanical protection to your cabling. The construction expands up to 3 times to allow easy insertions of cables and reverts back to original diameter for a snug fitment. The open weave design also dissipates heat and doesn't trap moisture.



Specifications	
Material	Polyphenylene Sulphide (PPS) monofilament UL94 V-0
Colour	Black
Length	2m

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5584	\$2.50	\$2.21	\$1.95
	WH-5585	\$2.95	\$2.60	\$2.30
	WH-5587	\$5.20	\$4.45	\$3.90
	WH-5588	\$7.95	\$6.95	\$6.25

SELF-CLOSING BRAIDED WRAP

Protect cabling neat and tidy, and protected from abrasion, wear and tear using this flame resistant self closing wrap. Each 2m length is flexible and lightweight, and the open structure allows it to be easily installed without having to remove connectors or terminals.



Specifications	
Material	PET Polyethylene Terephthalate
Operating range	-50°C to +150°C
Melt point	250°C @ 5°C
Flammability	VW-1
Certificate	RoHS, Halogen Free
Cutting tool	Hot knife
Colour	Black
Length	2m

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5630	\$6.95	\$6.25	\$5.50
	WH-5632	\$7.95	\$6.95	\$6.25
	WH-5634	\$9.95	\$8.75	\$7.75
	WH-5636	\$12.95	\$11.35	\$10.35

BRAIDED HOOK & LOOP LOOM WRAP - 1.5M

A fantastic solution for keeping cables wrapped up and neatly arranged. Wraps around your cables and secures them with hook and loop. When you need to add or remove cables, just undo the hook and loop. Couldn't be easier!

- Hook and loop width: 20mm
- Material : Polyester
- Working temperature: -50° to 150°C
- Melting point: 230°C +/- 5°C



32MM - 1.5M
WH-5654

51MM - 1.5M
WH-5656

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5654	\$14.95	\$13.35	\$11.70
	WH-5656	\$17.95	\$15.95	\$14.35

MULTI-FILAMENT ZIPPER WRAP - 1.5M

No more messy cables! Simply insert the cable and do up the zip. Will keep messy computer cabling, tangled home theatre AV cabling, or general power cabling neat and tidy but still easily accessible when you need to change a connection. Double filament for extra strength and durability

- Material: Polyester Multi-Filament
- Working temperature: -50° to 150°C
- Flammability: VW-1
- Melting point: 240°C +/- 1°C
- Colour: Black



Two versions available

30MM - 1.5M
WH-5661

50MM - 1.5M
WH-5663



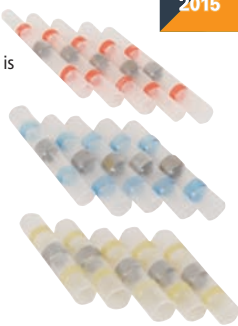
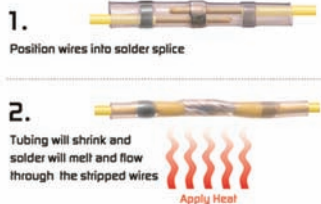
↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WH-5661	\$21.95	\$19.70	\$17.35
	WH-5663	\$34.95	\$31.45	\$27.90

HEATSHRINK ACCESSORIES

SOLDER SPLICE HEAT SHRINK TUBE - PACK OF 5

Solder splice heat shrink tubes allow you to quickly join two cables thanks to the small section of solder in the middle of the tube. Simply slide a tube over the join in two cables and heat as you would any other shrink tube. As the tube shrinks the solder melts to electrically connect the wires resulting in a join which is reliable and well insulated. Available in four sizes approximately 26-40mm in length with 5 pieces per pack. Shrink ratio 2:1.

NEW
2015



↑	Dia. x Length (mm)	Pk	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.7 x 26 NEW	6	WH-5669	\$4.95	\$4.45	\$4.00
	2.7 x 40	5	WH-5670	\$4.95	\$4.45	\$3.90
	4.5 x 40	5	WH-5671	\$4.95	\$4.45	\$3.90
	6.0 x 40	5	WH-5672	\$4.95	\$4.45	\$3.90

ASSORTED SOLDER SPLICE HEATSHRINK PACK - 42 PIECES

A handy assorted pack of solder splice heatshrink tubes to join electrical wires quickly and easily and make a good quality join. Each splice has just the right amount of solder to create a secure connection.

Kit includes:
12 x White 1.7 x 26mm
12 x Red 2.7 x 40mm
12 x Blue 4.5 x 40mm
6 x Yellow 6.0 x 40mm



NEW
2015

1
YEAR WARRANTY

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	42	WH-5668	\$34.95	\$31.45	\$27.90

TAPE

HEATSHRINK TAPE - BLACK

Ideal for emergency repairs or when you aren't able to use a piece of tubing. It conforms to odd shapes that heatshrink tubing is unable to, and has a low melting point adhesive for easy installation. It also remains flexible at extremely low temperatures. Keep a roll in the toolkit.

- Operating temperature: -40 - 105°C
- Shrink temperature: 125°C
- 25mm wide x 5m roll



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
25mm wide 5m roll	WH-5659	\$12.95	\$11.35	\$10.35

SILICONE RESCUE TAPE

Rescue tape is a self-fusing tape made of the highest quality materials for a permanent air-tight and water-tight seal in emergency situations. Just wrap it around a troublesome leak and it will bond in seconds. The tighter you stretch the tape, the quicker it will bond. Brilliant!

- Resists fuels, oils, acids, solvents, salt water, road salt, UV rays
- Remains flexible to -60°C (-85°F)
- Operating temperature range: -65°C to 260°C / -85°F to 500°F
- Continuous temperature range: -60°C to 200°C / -76°F to 392°F
- Cold brittle point: -85°F / -65°C
- Tensile strength (Min.): 700 psi
- Elongation (Min.): 300%
- Tear strength (Min.): 85 ppi
- Bond strength (Min.): 2 Lbs
- Water absorption (Max.): 3% By Weight
- Dielectric strength (Min): 400 volts/mil (8,000 V/20 Mil)
- Measures 1" x 12 FT (Approx: 25.4mm x 3.6mm)



DID YOU KNOW?

You can repair a burst radiator hose with this!

RESCUE TAPE

↑	Cat.	Qty 1+
1" wide 12 foot roll	NA-2829	\$24.95

WIRE GLUE

WIRE GLUE

A soldering iron in a jar. Wire Glue is a electrically conductive adhesive that enables you to make solder-free connections when you don't have a soldering iron handy, or aren't able to apply heat for some reason. Hundreds of hobby, trade and electronics uses. Lead-free, cures overnight.

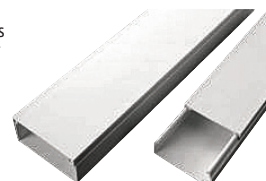


↑	Cat.	Qty 1+	Qty 4+	Qty 10+
9ml	NM-2831	\$9.95	\$8.75	\$7.75

CABLE MANAGEMENT

RECTANGULAR CABLE DUCT - 1M

Keep your home theatre cables under control and neatly out of the way. Available in two sizes and in convenient 1m lengths, the leads to your wall-mounted plasma or LCD TV will be kept bundled up but easily accessible. The cover can be quickly removed and replaced for maintenance and can be painted to match the colour of your wall.



- 25 x 16mm x 1m Cat HP-1330
- 50 x 25mm x 1m Cat HP-1332

↑	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
	25 x 16mm	HP-1330	\$6.95	\$6.25	\$5.50
	50 x 25mm	HP-1332	\$9.95	\$8.75	\$7.75

FLOOR OR WALL CABLE DUCTING

This extruded ducting helps conceal messy cables across doorways, along skirting boards or walls. Great for offices or home. The ducting is 50.8mm wide and is sold in convenient 1.83m lengths.



↑	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.83m	HP-1226	\$15.95	\$14.35	\$12.70

ROUND DESK GROMMET

No more tangled wires and cables! The desk grommet is the perfect way to easily and neatly store your power, communication, audio, video, computer and data cables. It is ideal for installation in desks, workstation, telephones cabinets or entertainment unit. Simply drill or cut a 60mm hole through the surface and insert the grommet into the hole.

- Dimensions: 60mm (diameter)
- Black in colour



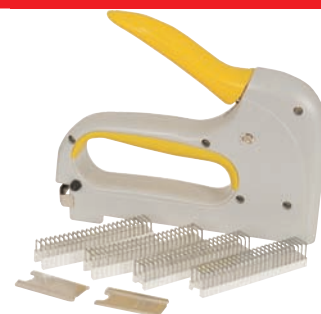
↑	Cat.	Qty 1+	Qty 4+	Qty 10+
60mm (diameter)	HP-1228	\$9.95	\$8.75	\$7.75

CABLE STAPLE GUN

CABLE STAPLE GUN

Take the pain out of cable installation. Instead of trying to pound away with a hammer, simply staple the cable to eaves, rafters or joists. The staples have an integral plastic cable clamp that holds the cable firmly in place. The gun takes a variety of staples sizes to accommodate cables up to 8.0mm diameter.

- Includes gun, 2 interchangeable blades and 200 staples
- Refill staples available



↑	Pkt	Cat.	Qty 1+	Qty 3+	Qty 6+
	Cable Gun	TH-2610	\$19.95	\$17.70	\$15.70
	Refill Staples 4-6mm	TH-2611	\$9.95	\$8.75	\$7.75
	Refill Staples 6-8mm	TH-2612	\$9.95	\$8.75	\$7.75

CABLE TIE MOUNTS

ADHESIVE CABLE TIE MOUNTS

These are used in conjunction with our cable ties. They simply stick to the surface, then the cable tie is looped through and around the cables.

- 21mm square.



↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	10	HP-1195	\$4.50	\$3.95	\$3.60

RUBBER FEET

SMALL STICK ON

Dimensions: 12 x 12mm

- Height 6mm
- Moulded in oil resistant synthetic rubber



↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-0815	\$2.50	\$2.20	\$1.95
	20	HP-0816	\$7.95	\$6.95	\$6.25

LARGE STICK ON

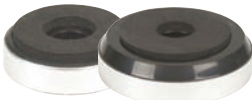
- Dimensions: 20 x 20mm
- Height 8mm
- Moulded in oil resistant synthetic rubber



↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-0825	\$3.95	\$3.45	\$3.15
	20	HP-0822	\$9.95	\$8.75	\$7.75

SCREW ON EQUIPMENT FEET

- Silver in colour
- Screw on
- Pack of 4



HP-0830 - 30mm
HP-0832 - 50mm

↑	Size mm	Cat.	Qty 1+	Qty 4+	Qty 10+
	30	HP-0830	\$6.95	\$6.25	\$5.50
	50	HP-0832	\$8.95	\$7.95	\$6.95

SCREW FIXING RUBBER FEET

Requires 3mm screw and nut.

- 11mm dia. x 7.5mm high
- Moulded in oil resistant synthetic rubber



↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-0800	\$4.50	\$3.95	\$3.60

RUBBER GROMMETS

RUBBER GROMMETS

Suitable for use with chassis up to 16 gauge/1.5mm.

- Moulded in oil resistant synthetic rubber
- Black



CHASSIS HOLE 9.5MM. CABLE DIA 6MM.

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-0702	\$3.95	\$3.45	\$3.15

CHASSIS HOLE 12.7MM. CABLE DIA 9.5MM

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	8	HP-0704	\$4.65	\$4.15	\$3.60

IP68 NICKEL PLATED BRASS CABLE GLANDS



These nickel-plated brass cable glands are certified to IP68 and provide superior grip and sealing. They are totally protected and O-ring sealed against the ingress of dust, moisture and water to a depth of one metre. The unique design speeds installation and eliminates the need to disassemble the gland before fitting. A self-adjusting cable seal allows the glands to be used on a wide range of cable sizes and minimises inventory holdings. These glands are supplied complete with seals and locknuts.

5 sizes are available.

Cat.	Cable Size
HP-0744	3 to 6.5mm
HP-0745	4 to 8mm
HP-0746	5 to 10mm
HP-0747	6 to 12mm
HP-0748	10 to 14 to 8mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-0744	\$7.45	\$6.50	\$5.75
	HP-0745	\$7.95	\$6.95	\$6.25
	HP-0746	\$8.95	\$7.95	\$6.95
	HP-0747	\$9.45	\$8.50	\$7.50
	HP-0748	\$9.95	\$8.75	\$7.75

CABLE GLANDS

IP68 WATERPROOF CABLE GLANDS

These unique cable clamps incorporate a unique sealing mechanism which works on the camera shutter principle. Simply mount the clamp, insert the cable through and tighten up. There is no need to disassemble the clamp prior to installation. These clamps are rated to IP68. This is the highest rating possible. They are totally dust tight and protected against submersion in water.



- Trapezoidal thread for quick high torque tightening
- No throwaway "O" rings
- Long metric thread
- Superior strain relief
- UL Approved NYLON 94V-2



3 - 6.5MM DIA CABLE Thread EP-7

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-0720	\$4.95	\$4.45	\$3.90

4 - 8MM DIA CABLE Thread EP-9

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-0724	\$5.45	\$4.90	\$4.30

5 - 10MM DIA CABLE Thread EP-11

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-0727	\$5.95	\$5.25	\$4.75

6 - 12MM DIA CABLE Thread EP-13.5

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-0732	\$6.45	\$5.75	\$4.95

10 - 14MM DIA CABLE Thread EP-16

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-0736	\$6.95	\$6.25	\$5.50

13 - 18MM DIA CABLE Thread EP-21

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	2	HP-0740	\$7.95	\$6.95	\$6.25

CORDGRIP CLAMPS

For cables 7.4mm - 8.2mm diameter, (3 wire mains).

- Panel cutout 14mm.
- Black nylon



↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-0716	\$1.95	\$1.75	\$1.55

For cables 6.2mm - 7.4mm diameter.

- Panel cutout 11.5mm

↑	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
	4	HP-0718	\$1.95	\$1.75	\$1.55

LET'S FIND EVERYTHING YOU NEED!

FROM
\$4.45

HB-6011



ENCLOSURES P123

FROM
\$5.95

QM-1502



MULTIMETERS P148

FROM
\$24.95

TS-1651



SOLDERING IRON KIT P173

FROM
\$16.95

TH-1987



PCB HOLDER P177

FROM
\$54.95

QM-3544



MAGNIFYING LAMP P144

FROM
\$1.95

SB-2424



BATTERIES P323

FROM
\$19.95

MP-3011



POWER SUPPLIES P438

FROM
\$11.95

TH-1897



CUTTERS P131

FROM
\$0.50

WB-1702

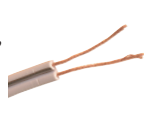


FIGURE 8 CABLE P206

FROM
\$7.95

WH-5525



HEATSHRINK P215

CABLE ACCESSORIES

DUNE TUBE WITH APPLICATOR - BLACK

Keep your cables neat and tidy. They are easily bent for corners and are slit so cables can enter or leave at any point. Simply slip in the cable, insert the applicator and slide away. Easier to use than Spiral Binding; more secure than Loom Tube!

- Made from black flexible plastic
- INCLUDES SPECIAL WIRE SHUTTLE.



↑ Dia.	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
15mm	2.5m	HP-1235	\$9.95	\$8.75	\$7.75
20mm	2.5m	HP-1237	\$11.95	\$10.70	\$9.50
20mm	10m	HP-1239	\$39.95	\$35.90	\$31.90

SPIRAL BINDING

Keep wiring tidy! Available in 2 sizes and colours and is easily wrapped around bunches of cables to keep them tidy.



↑ Dia.	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
6mm	2.5m	HP-1218	\$6.15	\$5.50	\$4.90
12mm	1.5m	HP-1219	\$6.15	\$5.50	\$4.90
6mm	2.5m	HP-1220	\$6.15	\$5.50	\$4.90
12mm	1.5m	HP-1222	\$6.15	\$5.50	\$4.90

LOOM TUBES



Tidy up the cables behind your PC or audio equipment, secure cabling in your car. The Loom Tube will keep wiring in place and suits many types of applications. The tube has a slit so that cables can enter/leave at any point along its length.

- Made from black flexible PVC.
- Three diameters available: 7, 10 or 19mm
- Available in either 2m or 10m lengths - just cut to suit.
- Good abrasion resistance.

↑ Dia.	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
7mm	2m	HP-1221	\$3.20	\$2.83	\$2.45
10mm	2m	HP-1224	\$3.80	\$3.30	\$2.95
19mm	2m	HP-1227	\$4.95	\$4.45	\$3.90
7mm	10m	HP-1223	\$14.95	\$13.35	\$11.70
10mm	10m	HP-1225	\$15.95	\$14.35	\$12.70
19mm	10m	HP-1229	\$19.95	\$17.70	\$15.70

CONCRETE CABLE TIE MOUNTS

Use these cable tie mounts in runs along walls and ceilings made of brick or concrete.

- UL 94V-2 approved Nylon.
- Hole required:
- Approx. 7mm dia x 37mm deep



↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
20	HP-0795	\$5.50	\$4.90	\$4.30
100	HP-0796	\$23.50	\$20.95	\$18.70

RAINCHECK!

If your local Jaycar store has sold out of a currently advertised line we will be happy to issue you with a 'raincheck'.

Conditions apply - see page 528 for details.

CABLE TIES

PLASTIC CABLE TIES



- UV Resistant
- Black Nylon
- Safe edges

Length	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
100mm	20	HP-1200	\$1.85	\$1.65	\$1.45
150mm	15	HP-1201	\$2.25	\$1.95	\$1.80
200mm	15	HP-1202	\$2.50	\$2.20	\$1.95
300mm	15	HP-1245	\$2.95	\$2.60	\$2.30
500mm	15	HP-1248	\$5.95	\$5.25	\$4.75
605mm	15	HP-1249	\$6.95	\$6.25	\$5.50
100mm	100	HP-1203	\$4.95	\$4.45	\$3.90
150mm	100	HP-1204	\$7.95	\$6.95	\$6.25
200mm	100	HP-1205	\$10.95	\$9.75	\$8.75
300mm	100	HP-1246	\$12.95	\$11.35	\$10.35
500mm	500	HP-1211	\$17.95	\$15.95	\$14.35
150mm	500	HP-1212	\$29.95	\$26.90	\$23.70
200mm	500	HP-1213	\$39.95	\$35.90	\$31.90
300mm	500	HP-1247	\$45.00	\$40.45	\$35.95

EXTRA LONG MIXED CABLE TIE SET

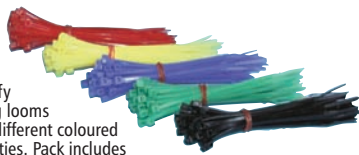


This handy cable tie set contains 70 black cable ties of various lengths up to 500mm.

- 10 pcs 500(L) x 10(W)mm
- 10 pcs 510(L) x 8(W)mm
- 20 pcs 400(L) x 5(W)mm
- 30 pcs 300(L) x 4(W)mm

↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
70	HP-1209	\$18.95	\$16.95	\$14.95

COLOURED CABLE TIES

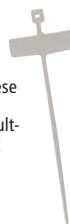


Identify wiring looms with different coloured cable ties. Pack includes 25pcs each of red, yellow, green, blue and black. Total 125 cable ties. Length 100mm.

↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
25	HP-1196	\$9.95	\$8.75	\$7.75

100MM LABEL CABLE TIES

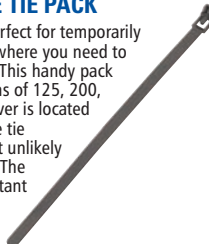
PACK OF 20
Ideal for large or complex wiring looms, these allow you to label cable bundles for identification later to make tracing or fault-finding easy. Easily marked with permanent marker or self-adhesive labels.



↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
20	HP-1244	\$3.50	\$3.15	\$2.75

RELEASABLE CABLE TIE PACK

Releasable cable ties are perfect for temporarily securing cables or for jobs where you need to periodically change cables. This handy pack contains 10 pieces at lengths of 125, 200, and 300mm. The release lever is located below the head of the cable tie making it easy to access but unlikely to be released accidentally. The ties are made from UV resistant black nylon and have safe edges to prevent cuts.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-1217	\$6.95	\$6.25	\$5.50

CABLE TIE TIDY KIT



Consists of: 30 x 120mm cable ties, 20 x 120mm reusable cable ties, 10 x self adhesive cable tie mounts, 20 x saddle type cable tie mounts.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-1198	\$9.95	\$8.75	\$7.75

CABLE TIE BOX - 400 PIECES

Let's face it, the mixed box of cable ties in all the colours of the rainbow is fine, however most of the time you only use about 2-3 different sizes and blacks the colour because of its UV stability. This is your box. This kit consists of: 100 pcs x 200mm, 100 pcs x 150mm, 200 pcs x 100mm.



All in a see through flat storage case that makes access to the ties easy. The box even has some compartment dividers included so that it becomes a parts storage box when all of the ties have been used up.

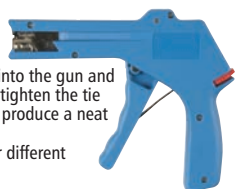
- Box measures; 250(W) x 180(D) x 40(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HP-1216	\$19.95	\$17.70	\$15.70

CABLE TIE GUN

Once you have wrapped the tie around the cable you simply slide the tail into the gun and pull the trigger. This will tighten the tie and cut off the excess to produce a neat and professional finish.

- Tension adjustment for different ties.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	TH-2600	\$23.95	\$21.35	\$18.95

HOOK & LOOP CABLE TIES

MIXED HOOK & LOOP CABLE TIES

Keep your cables neat and tidy. Packet of 16 hook & loop cable ties in assorted sizes from 125 to 180mm.



↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
16	HP-1232	\$9.95	\$8.75	\$7.75

HOOK & LOOP CABLE TIES

Tidy up behind the TV or audio equipment with these re-usable hook & loop cable ties. Each tie is 140mm in length.

- Note: Lead not supplied.



↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
5	HP-1210	\$4.95	\$4.45	\$3.90

FASTENERS & SCREWS

METRIC NYLON FASTENERS

- Precision moulded from white nylon.
- Fully insulated
- Suitable for high temperature work
- Corrosion free and won't shake loose.
- Ideal for transistor and heatsink use
- Supplied in polybag
- Round heads



M3 NYLON SCREWS, NUTS & WASHERS

Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M3 x 12mm	Screws, Phillips Drive Head	10	HP-0140	\$2.95	\$2.60	\$2.30
M3 x 25mm	Screws, Phillips Drive Head	10	HP-0142	\$3.50	\$3.15	\$2.75
M3 Nuts	Hex	10	HP-0146	\$3.00	\$2.60	\$2.30
M3 Nuts	Hex with Washer	25	HP-0150	\$6.50	\$5.75	\$4.95
M3 Washer	Flat	10	HP-0148	\$2.50	\$2.20	\$1.95

M4 NYLON SCREWS, NUTS & WASHERS

Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M4 x 10mm	Screw, Phillips Drive Head	25	HP-0160	\$7.50	\$6.75	\$5.95
M4 x 16mm	Screw, Phillips Drive Head	25	HP-0162	\$8.50	\$7.50	\$6.75
M4 Nuts	Hex	25	HP-0168	\$7.00	\$6.25	\$5.50
M4 Washers	Flat 10mmOD, 4.2mmID	25	HP-0166	\$5.00	\$4.45	\$3.95

WOODSCREWS - PHILLIPS HEAD

- Ideal for mounting speakers
- Black finish
- No.6 size suitable for tweeters, midrange and crossovers.
- No.10 size suitable for Woofers



Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
No.6 x 15mm	Round Head (Tweeters)	20	HP-0620	\$4.95	\$4.45	\$3.90
No.6 x 15mm	Countersunk	20	HP-0626	\$4.95	\$4.45	\$3.90
No.8 x 25mm	Countersunk	20	HP-0625	\$5.95	\$5.25	\$4.75
No.10 x 30mm	Round Head (Woofers)	20	HP-0624	\$5.95	\$5.25	\$4.75
No.10 x 30mm	Countersunk	20	HP-0628	\$5.95	\$5.25	\$4.75

SELF-TAPPING SCREWS

- Nickel plated Steel



Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
No.4 x 6mm	Phillips Head	25	HP-0550	\$3.00	\$2.60	\$2.30
No.4 x 9mm	Phillips Head	25	HP-0565	\$3.00	\$2.60	\$2.30
No.4 x 12mm	Phillips Head	25	HP-0554	\$3.50	\$3.15	\$2.75
No.8 x 12mm	Phillips Head	25	HP-0558	\$4.00	\$3.60	\$3.15

METRIC METAL THREAD FASTENERS

- Nickel or Cadmium Plated and passivated screws
- Supplied in polybag



M2 SCREWS

Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M2 x 8mm	Screw, Pozi Drive	4	HP-0390	\$1.50	\$1.35	\$1.20

M3 EQUIPMENT SCREWS

*Black japanned screws used holding top/side panels on VCR, DVD, Amplifiers, etc.

Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M3 x 5mm	Screw, Phillips, Black	25	HP-0440	\$2.30	\$2.03	\$1.80
M3 x 5mm	Screw, Phillips, Black	200	HP-0441	\$6.00	\$5.25	\$4.75

M3 SCREWS, NUTS & WASHERS

Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M3 x 6mm	Screw, Phillips	25	HP-0400	\$2.50	\$2.20	\$1.95
M3 x 6mm	Screw, Phillips	200	HP-0401	\$6.50	\$5.75	\$4.95
M3 x 10mm	Screw, Phillips	25	HP-0403	\$3.00	\$2.60	\$2.30
M3 x 10mm	Screw, Phillips	200	HP-0404	\$7.50	\$6.75	\$5.95
M3 x 15mm	Screw, Phillips	25	HP-0406	\$3.50	\$3.15	\$2.75
M3 x 15mm	Screw, Phillips	200	HP-0407	\$8.50	\$7.50	\$6.75
M3 x 20mm	Screw, Phillips	25	HP-0410	\$3.50	\$3.15	\$2.75
M3 x 25mm	Screw, Phillips	25	HP-0414	\$3.50	\$3.15	\$2.75
M3 x 32mm	Screw, Phillips	25	HP-0418	\$4.00	\$3.60	\$3.15
M3 Nuts	Hex	25	HP-0425	\$2.95	\$2.60	\$2.30
M3 Nuts	Hex	200	HP-0426	\$9.95	\$8.75	\$7.75
M3 Washers	Flat	25	HP-0430	\$3.00	\$2.60	\$2.30
M3 Washers	Flat	200	HP-0431	\$7.95	\$6.95	\$6.25
M3 Washers	Shakeproof	25	HP-0433	\$3.50	\$3.15	\$2.75
M3 Washers	Spring	25	HP-0436	\$3.00	\$2.60	\$2.30

M4 SCREWS, NUTS & WASHERS

Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M4 x 10mm	Screw, Phillips	25	HP-0450	\$3.50	\$3.15	\$2.75
M4 x 10mm	Screw, Phillips	200	HP-0451	\$9.50	\$8.50	\$7.50
M4 x 15mm	Screw, Phillips	25	HP-0453	\$4.50	\$3.95	\$3.60
M4 Nuts	Hex	25	HP-0462	\$3.50	\$3.15	\$2.75
M4 Washers	Flat	25	HP-0465	\$3.50	\$3.15	\$2.75
M4 Washers	Shakeproof	25	HP-0468	\$4.00	\$3.60	\$3.15

M6 RACK SCREWS, NUTS & WASHERS

Suitable for mounting rack style enclosures into rack units



Size	Type	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
M6 x 16mm	Screw, Pozi Drive, Black	12	HP-0300	\$4.95	\$4.45	\$3.90
M6 Nuts	Captive Nuts	12	HP-0310	\$7.95	\$6.95	\$6.25
M6 Washer	Flat Washer	12	HP-0322	\$3.50	\$3.15	\$2.75

NUTS & SPRINGS

POTENTIOMETER NUTS

Packet of 12 potentiometer nuts and washers.



Size	Thread	Pack	Cat.	Qty 1+	Qty 10+	Qty 50+
24mm	3/8" 32THD	12	RP-3500	\$3.50	\$2.75	\$2.45
16mm	Metric	12	RP-7500	\$3.50	\$2.75	\$2.45

200 PIECE SPRING ASSORTMENT

This set contains approximately 200 springs, with 20 different types, compression and tension. They range from 10mm long to 70mm long.

- Sizes for all are given on the lid
- Supplied in a plastic storage case



THREAD REPAIR KITS (SMALL METRIC) M3, M4, M5 & M6

These products enable you to drill out a stripped or otherwise damaged thread in a blind hole. You can then insert a replacement thread with the coiled thread inserts and regain full function of the threaded hole, often giving a much stronger thread than the original one. This also works when a damaged stud or screw shaft has been removed.

The basic thread repair kit includes:
drill bit, thread tap, insertion tool, tag punch and 10 inserts of the nominated thread size.

Four versions available:

- HP-1600 Thread repair kit for M3 threads
- HP-1602 Thread repair kit for M4 threads
- HP-1604 Thread repair kit for M5 threads
- HP-1606 Thread repair kit for M6 threads



Size	Type	Cat.	Qty 1+	Qty 3+	Qty 6+
M3		HP-1600	\$29.95	\$26.90	\$23.70
M4		HP-1602	\$29.95	\$26.90	\$23.70
M5		HP-1604	\$29.95	\$26.90	\$23.70
M6		HP-1606	\$29.95	\$26.90	\$23.70

SPACERS

UNTAPPED NYLON PCB SPACERS

Superb range of spacers. Fixing is by size 6 or 8 self tapping screws. The hex centre section can be gripped to prevent rotation while fixing.

- OD 8.2mm.



Length	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
6mm	5	HP-0980	\$2.75	\$2.45	\$2.15
12mm	5	HP-0982	\$2.75	\$2.45	\$2.15
19mm	4	HP-0984	\$2.75	\$2.45	\$2.15
25mm	4	HP-0986	\$2.95	\$2.60	\$2.30
32mm	4	HP-0988	\$3.50	\$3.15	\$2.75
38mm	4	HP-0990	\$3.95	\$3.45	\$3.15

UNTAPPED NYLON SPACERS

- Untapped
- ID 4.1mm. OD 6.4mm.



Length	Diameter	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
6mm	6mm	25	HP-0930	\$6.95	\$6.25	\$5.50
10mm	6mm	25	HP-0934	\$7.95	\$6.95	\$6.25

MOUNTING ACCESSORIES

SPACERS (CONTINUED)

3MM TAPPED NYLON SPACERS

These spacers are tapped all the way through for a 3mm screw.

- OD 6mm.

↑ Length	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
6.3mm	25	HP-0920	\$8.95	\$7.95	\$6.95
9mm	25	HP-0922	\$9.45	\$8.50	\$7.50
12mm	25	HP-0924	\$9.95	\$8.75	\$7.75
15mm	25	HP-0926	\$11.95	\$10.70	\$9.50

UNTAPPED METAL SPACERS

- Nickel plated steel
- Untapped.
- ID: 3.4mm OD 4.7mm.

↑ Length	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
6mm	8	HP-0860	\$3.65	\$3.15	\$2.90
9mm	8	HP-0862	\$3.95	\$3.45	\$3.15
12mm	6	HP-0864	\$4.65	\$4.15	\$3.60
25mm	4	HP-0866	\$4.95	\$4.45	\$3.90

3MM TAPPED METAL SPACERS

- Nickel plated
- 3mm standard metric thread

↑ Length	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
10mm	8	HP-0900	\$3.95	\$3.45	\$3.15
10mm	200	HP-0901	\$29.50	\$26.45	\$23.35
15mm	8	HP-0904	\$4.95	\$4.45	\$3.90
25mm	8	HP-0907	\$5.95	\$5.25	\$4.75

PCB STANDOFFS

ADHESIVE PCB STANDOFFS

The self adhesive base sticks directly to the chassis.

- Requires 4mm PCB hole.
- Adhesive pads 18mm square.
- Two heights available.
- Nylon

↑ Height	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
6.35mm	25	HP-0760	\$11.95	\$10.70	\$9.50
12.7mm	25	HP-0762	\$13.95	\$12.35	\$10.95

SCREW MOUNT PCB SUPPORTS

These supports have a 2.5mm hole for securing to chassis with a screw, use 3 x 10mm or a self tapper.

- Two heights available.
- Requires 4mm PCB hole.
- Nylon

↑ Height	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
10mm	25	HP-0764	\$7.95	\$6.95	\$6.25
20mm	25	HP-0766	\$9.95	\$8.75	\$7.75

FLUSH MOUNT PCB SUPPORTS

These are virtually flush mount on the underside of the chassis.

- PCB hole 4mm.
- Chassis hole 5.5mm
- Chassis thickness 0.8-1.2mm.
- Two heights available.
- Nylon

↑ Height	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
6.35mm	25	HP-0774	\$6.95	\$6.25	\$5.50
10mm	25	HP-0776	\$7.50	\$6.75	\$5.95

SCREWLESS PCB STANDOFF

- Nylon

Saves using nuts, bolts and spacers. Size 8mm. Requires 3mm hole each end.

↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
8	HP-0770	\$2.50	\$2.20	\$1.95

METAL RIGHT ANGLE STANDOFFS

Threaded M3 standoffs, right angle.



↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
8	HP-0872	\$4.95	\$4.45	\$3.90

CABLE CLIPS / CLAMPS

ADHESIVE CABLE / BUNDLE MOUNTS

These have an adhesive base 25 x 18mm and cable tie that clips into the base to retain individual cables, or bundles of wiring.

- The maximum cable bundle diameter accommodated is 17mm.
- The base also has a 3mm hole for a screw mount if required.



↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
10	HP-1190	\$6.95	\$6.25	\$5.50

ADHESIVE CABLE CLIPS

The easy way to secure cables to walls, cabinets etc. Simply peel off adhesive cover and slip cable in.

- Please note all sizes are in mm.
- Nylon



Cat.	A	B	C	D	E
HP-0782	11.7	5.9	15.9	2.5	5.2
HP-0784	13.4	8.2	16.0	4.7	8.0
HP-0786	19.0	11.9	19.0	7.9	11.8

↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
25	HP-0782	\$9.50	\$8.50	\$7.50
25	HP-0784	\$10.50	\$9.25	\$8.25
25	HP-0786	\$11.50	\$10.35	\$8.95

CABLE CLIPS

These clips are made using a high-density polyethylene plastic material and galvanised high carbon steel nails. Available in packets of 25 and are priced up to 50% less than others.

- 4 sizes available



3 X 5MM

Accepts cables up to 3mm high by 5mm wide. Suits the following: WB-1706/WB-1708 speaker cable & 6 core flat telephone cable.

↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
25	HP-0680	\$2.45	\$2.15	\$1.95

5 X 8MM EXPANDABLE

Suits round cables with 5 x 8mm diameter - including 4 core alarm cable, 75Ω thin coax and 50Ω thin coax.

↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
25	HP-0682	\$2.75	\$2.45	\$2.15

5 X 7MM

Accepts cable up to 5mm high by 7mm wide. Suits the following: WB-1706/WB-1708 speaker cable & 6 core flat telephone cable

↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
25	HP-0692	\$2.95	\$2.60	\$2.30

7 - 10MM EXPANDABLE

Suitable for round cable 7-10mm diameter - including 6 core alarm cable, air spaced coax and Belden coax.

↑ Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
25	HP-0694	\$3.45	\$3.05	\$2.75

'P' TYPE CABLE CLAMPS

- Nylon



↑ Size	Pack	Cat.	Qty 1+	Qty 4+	Qty 10+
For 5mm cable	6	HP-0752	\$1.95	\$1.75	\$1.55
For 7mm cable	6	HP-0754	\$2.45	\$2.15	\$1.95
For 10mm cable	6	HP-0756	\$2.95	\$2.60	\$2.30

LET'S POINT YOU TO THE RIGHT PAGE...

Auto & Outdoors

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EVENT RECORDERS - DASH CAMS

A lot of the spectacular video seen on the TV News comes these days from devices called Event Recorders. They can be attached to the windscreen of your car, in a shop (acting as a security camera) or even in a bushland setting to record animal or intruder activity. They offer quality pictures and draw little power.

They can be movement triggered or not. They have really changed the way we live in the world, as you never know when you are being electronically observed these days. Jaycar has a great range of these products to suit every application and every budget.

1080p CAR EVENT RECORDER

A low cost car event recorder capable of recording in full HD. Record and watch in real time simultaneously. The camera records on to a microSD card (not included) and supports up to 32GB of capacity. Features G-Force sensor for automatic incident file separation recording, which is supported with a wide 140° camera angle. Powered by the supplied car cigarette adaptor or the built-in battery. Ideal for fleet vehicles, taxis and for those searching for assurance on the roads.

- Supplied with USB cable, car charger, windscreen mount and user manual.

Specifications	QV-3852
LCD	1.5" Colour
Lens	140° wide angle lens
Video Resolution	1080FHD 1920x1080 / 1080p 1440x1080
VGA	720p 1280x720 / WVGA 848x480
Video Format	640x480 / QVGA 320x240
Photo Format	AVI
Photo Resolution	JPEG
Photo Resolution	12M/10M/8M/5M/3M/2MHD/VGA/1.3M
Loop Cycle Recording	Off/1min/3min/5min/10min
Image Rotation	Off/ON
Motion Detection	Off/ON
Built-in Battery	Lithium battery 100mAh
Audio	Built-in microphone
Dimensions	67(L) x 43(W) x 32(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
1080p Dash Cam with 1.5" Display	QV-3852	\$79.95	\$71.95	\$63.95

1080p CAR EVENT RECORDER WITH 2.7" LCD DISPLAY

Catch all the detail in 1080p high definition resolution. This car event recorder features a high quality, 140° wide angle lens takes that captures events and displays them on a 2.7" high resolution LCD. Integrated G-shock sensor separates event files. The seamless loop-cycle recording feature means you will never miss an event! Supplied with USB cable, car charger, windscreen mount and user manual. Supports microSD cards up to 32GB.

- Supports HDMI full HD video transmission.

Specifications	QV-3854
Sensor	5.0MP CMOS
LCD	2.7" Colour
Lens	140° wide angle lens
Video Resolution	1080FHD 1920x1080 / 1080p 1440x1080
VGA	720p 1280x720 / WVGA 848x480
Video Format	640x480 / QVGA 320x240
Photo Format	Auto/100/200/400
Photo Resolution	MOV (H.264)
Photo Resolution	JPEG
Photo Resolution	12M/10M/8M/5M/3M/2MHD/VGA/1.3M
Loop Cycle Recording	Off/1min/3min/5min/10min
Image Rotation	Off/ON
Motion Detection	Off/ON
Built-in Battery	Lithium battery 500mAh
Audio	Built-in microphone
Dimensions	114(L) x 47(W) x 33(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
1080p Dash Cam with 2.7" Display	QV-3854	\$119.00	\$106.95	\$94.95

EVENT RECORDERS

EVENT RECORDERS - DASH CAMS (CONTINUED)

1080p HD CAR EVENT RECORDER WITH GPS

Capture 1080p footage of incidents on the road to save you from a "he said, she said" argument. Features a G-sensor so when the unit detects vehicle movement, it will start recording footage showing car position/angle which may provide crucial evidence for insurance claims. It also has an auto-start mode which begins recording as soon as you start your engine. The supplied software allows video playback and displays the GoogleMaps position as well as speed and date/time. 4 x IR LEDs are positioned on the front for capturing footage at night. Footage can be viewed on the 2.7" LCD screen, or by using the mini HDMI port (with included cable) for easy playback on a large screen TV. The small camera size ensures that it does not impact on the driver's visibility of the road, and the control buttons are all in the right places allowing quick and easy access in your car for starting, stopping, and configuring settings.

Charge from the supplied cigarette lighter charger. Use the supplied 3M adhesive to attach to your windscreen.

- 170° Ultra High definition wide angle lens
- Recording resolutions
1920 x 1080 at 30fps
1440 x 1080 at 30fps
1280 x 720 at 60fps
1280 x 720 at 30fps
- Requires microSD card
(Class 6, 4GB to 32GB)
- H.264 compression
- 4 x digital zoom, range 12cm to infinity
- 2.7" LCD
- Supports night vision
- HDMI out
- 30/60fps

Specifications	QV-3842
Sensor	5M CMOS sensor,
Lens	Aperture 2.5, focal length: 2.8mm
Zoom	4 x digital zoom
Screen	2.7" TFT LCD
Video output	AV(CVBS) , HDMI (Max 1920 x 1080)
Memory	Supports Class 6, 4GB to 32GB microSD card
Photo	5MP
Shutter	Electronic shutter
Battery	300mAh, 3.7V Li-po battery included
Dimensions	88(W) x 47(H) x 35(D)mm



↑	Cat.	Qty 1+	Qty 2+
1080p Dash Cam with 2.7" Display & GPS	QV-3842	\$239.00	\$219.00

1080p DUAL CAMERA CAR EVENT RECORDER

Cover both front and rear view with this 1080p dual camera event DVR. The main front camera mounts on the dash or the windshield and is connected to the rear camera via a wiring loom. In addition to GPS, this unit is sensor packed and includes collision warning systems in all directions as well as head way monitoring and lane departure warning. Every movement is covered! Capture events and record to an microSD card in Full HD at 30 frames per second. Playback can be viewed on the 3" LCD. Supplied with a USB cable, cigarette lighter charging, windscreen mount and all wiring looms.

- LDWS (Lane Departure Warning System)
- FCWS (Front Collision Warning System)
- BCWS (Back Collision Warning System)
- FMWS (Front Moving Warning System)
- SCWS (Side Collision Warning System)
- HMWS (Headway Monitoring Warning System)
- Motion Detection
- Loop Recording
- GPS, G-sensor

Specifications	QV-3850
Sensor	3.0MP CMOS Sensor
LCD	3.0 inch TFT LCD(16:9) 960*240
Lens	170° ultra wide angle lens + 170° (Rear Camera) f=2.8mm; F/1.8
Video Resolution	Dual Channel 1920*1080p Full HD @30fps
Video Format	TS/H.264
Photo Format	JPEG
Photo Resolution	2MP
Media Storage	microSD card support to 64GB
Interface	Support USB/HDMI/AV-IN
TV output	Composite: PAL/NTSC
Audio	Built in microphone/speaker
Dimensions	98(L) x 55(W) x 30(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
1080p Dash Cam with 3" Display & Dual Cameras	QV-3850	\$299.00	\$269.00	\$239.00

CAR / HOME BABY MONITOR

RECHARGEABLE CAMERA & MONITOR KIT

A multi-purpose camera and monitor kit which can be used in the home or in the car for keeping an eye on an infant, or for general household surveillance. It includes a 4.3" LCD and a camera as well as suction mounts for each. Both the camera and monitor are completely wireless with internal rechargeable batteries so you need not worry about cabling at all. The units come pre-paired straight out of the box, so it's simply a matter of switching both on and audio/video will be streamed live from the camera to the monitor. Couldn't be easier!

The camera features IR LEDs allowing it to feed viewable video footage back to the monitor.

- Mains adaptor and cigarette lighter cable are provided for recharging the camera and monitor units.

SEE PAGE 524 FOR BABY MONITORS

Specifications	QV-3217
Transmission Frequency	2.4GHz-2.48GHz
Transmission Power	17dBm
Operating Frequency	2450MHz
Unobstructed range	250m
Modulation mode	FHSS
Battery life	5 hours
LCD	4.3" TFT LCD
Camera dimensions	60(L) x 60(H) x 25(D)mm
Monitor dimensions	125(L) x 80(H) x 20(D)mm



2.4GHz DIGITAL



↑	Cat.	Qty 1+
Rechargeable Camera & Monitor Kit	QC-3217	\$139.00
Spare Camera	QC-3211	\$79.95

WIRELESS REVERSING CAMERA KITS

WIRELESS 2.4GHZ REVERSING CAMERA & LCD MONITOR

Reversing cameras can be tricky to install, especially running video and other cables under the dash to the display unit. Like a GPS, the LCD on this unit plugs straight into your car's cigarette lighter socket and receives video via 2.4GHz wireless from the reversing camera.

- Camera can be mounted internally to fire through the rear window or externally on the number plate or bumper
- Transmission range is up to 80m
- Suitable for very large motorhomes, trucks or caravans.

Specifications	QM-3796
LCD	3.5"
Power	12VDC
Range	Up to 80m
Image Sensor	1/4" Colour CMOS
Camera Resolution	640 x 480 VGA
Frequency	2.4GHz
Channel	1
TV System	PAL/NTSC
Dimensions	110(W) x 76(H) x 21(D)mm

2.4GHz DIGITAL



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
2.4GHz Reversing Camera & Display Kit	QM-3796	\$169.00	\$151.95	\$134.95

WIRELESS 2.4GHZ REVERSING CAMERAS & LCD MONITOR KIT - 2 CAMERAS

The cameras can be mounted externally on the number plate of the vehicle or trailer and just need to be wired to the reverse lights. Each camera transmits wirelessly to the 3.5" colour monitor which mounts to the windscreen using a suction cup and plugs into the cigarette lighter socket for power.

- 2.4GHz transmission provides a range of up to 80m making it suitable for a wide range of vehicle and trailer combinations including very large motor homes, trucks and caravans.
- CMOS colour
- Manual vertical angle adjustment

Specifications	QM-3797
LCD	3.5"
Power	12VDC
Range	Up to 80m
Image Sensor	1/4" Colour CMOS
Effective pixels	320 x 240 pixels
Camera Resolution	640 x 480 pixels
Frequency	2414MHz, 2468MHz
Channel	V1/V2 switching
TV System	PAL/NTSC
Dimensions	110(W) x 77(H) x 22(D)mm

2.4GHz DIGITAL



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
2.4GHz Dual Reversing Camera & Display Kit	QM-3797	\$229.00	\$209.00	\$182.95

2.4GHZ DIGITAL WIRELESS REVERSING CAMERA

A robust, easy to install digital wireless reversing camera kit to give you a clearer view of your vehicles rear end. Since it is a wireless system it greatly minimises the need for cabling. The 4.3" LCD can be suction mounted to your windscreen and is directly powered from the cigarette lighter socket. The rear camera has a mounting plate with 3M® adhesive backing for hassle free and secure attachment to your vehicle. Since reversing at night is potentially the most dangerous, the camera has been fitted with 6 x IR LEDs which allow clear nightvision. A great solution for protecting your car and those behind you.

2.4GHz Digital Wireless Reversing Camera for QM-3852 sold separately

Specifications	QM-3852
Suitable	For 12VDC systems
LCD	4.3"
Power	8-30VDC
Range	Up to 50m
Frequency	2.4GHz
Sensor type	CMOS
Sensor size	1/4"
View angle	105°
Resolution	VGA 640 x 480
White balance	Auto
Frame rate	30fps
USB port	1.1 and above
SNRV	CMOS sensor 50dB
TV System	PAL/NTSC
Camera dimensions	84(W) x 42(H) x 36(D)mm
Monitor dimensions	140(W) x 87(H) x 21(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
2.4GHz Digital Reversing Camera	QM-3852	\$219.00	\$196.95	\$174.95
Spare Camera	QM-3854	\$94.95	\$85.50	\$75.95

LET'S FIND OUR OTHER EVENT RECORDERS...

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FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

REVERSING CAMERA KITS

WIRELESS REVERSING CAMERA KITS (CONTINUED)

2.4GHZ WIRELESS REVERSING CAMERA WITH DVR

An easy to install wireless camera kit for your car which consists of an LCD playback monitor, an event recording camera on the back of the screen, as well as a reversing camera for the rear of your car. The event recorder is very handy for capturing accidents or road rage incidents and the reversing camera is great for checking blind spots. The LCD monitor plugs directly into your car's cigarette lighter socket, receives video from both camera options and can store up to 32GB of data on a microSD card (available separately). The camera is able to record 720p footage at 30fps directly to a microSD card and is fitted with 6 x IR LEDs for nightvision. An all in one in-car solution for safely reversing and capturing incidents on the road.

- Transmission range up to 50m
- Infrared LEDs for reversing after dark
- Very little wiring necessary

Specifications	QM-3850
LCD	4.3"
Power	8-15VDC
Range	Up to 50m
Memory	Requires microSD card up to 32GB
Frequency	2.4GHz
Sensor type	CMOS
Sensor size	1/4"
View angle	120°
Resolution	HD 1280 x 720, VGA 640 x 480
White balance	Auto
Recording format	AVI
Frame rate	30fps
Video compression	MJPEG
USB port	1.1 and above
SNRV	CMOS sensor 50dB
TV System	PAL/NTSC
Camera dimensions	84(W) x 42(H) x 36(D)mm
Monitor dimensions	140(W) x 87(H) x 21(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
Reversing Camera with 4.3" Display	QM-3850	\$249.00	\$225.00	\$198.95

DIGITAL WIRELESS REVERSING CAMERA WITH 7" LCD DISPLAY

Utilising digital 2.4GHz wireless technology, this wireless reversing camera system offers up to 80m range with crystal clear picture quality and negligible video lag. Ideal for large vehicles with big blind spots such as trucks, buses, RV's, etc. The IP65 waterproof camera supplied comes fitted with IR LEDs for operation in low light conditions. Video is displayed on the slimline 7" LCD monitor, which has a quick latch bracket, so it can be easily removed and hidden away from prying eyes when not in use.

Additional cameras for system expansion are available - QM-8047.

Specifications	QM-8046
LCD	7"
Power	12 - 24VDC
Range	up to 80m
Image Sensor	1/4" Colour CMOS
Effective pixels	640 x 480
Frequency	2.4GHz Digital
Channels	4
TV System	PAL
Dimensions	205(L) x 120(H) x 25(D)mm



QM-8047



	Cat.	Qty 1+	Qty 2+	Qty 4+
Reversing Camera with 7" LCD Display	QM-8046	\$299.00	\$269.00	\$239.00
Wireless Infrared Camera	QM-8047	\$99.95	\$89.95	\$79.95

WIRED REVERSING CAMERA KITS

ULTIMATE REAR-VIEW SYSTEM - WIRED

This unit enables you to monitor the area to the rear of a bus, truck, caravan, RV etc, view a much wider field-of-view than any rear view mirror array and works in the dark with IR lighting. The system comes with a 7" (diagonal) LED display that has two video inputs, so you could (for example) have another camera monitoring, say bus passengers (camera extra). The rear vision camera is fitted with a SHARP (Japan) CCD device with 18 x IR LED's for night vision illumination. The housing of the camera is metal, IP65 and has a gymbal bracket. It can be mounted externally. The kit is supplied with 5m of pre-terminated connecting cable. A remote control for the monitor is also provided.

In keeping with the professional status of the product, it will work from 12 or 24VDC.

Dimensions:

- Monitor 178 x 120 x 28mm
- Camera 74 x 48 x 65mm

Specifications	QM-3742
LCD	7"
Power	12/24VDC
Range	Wired
Image Sensor	Sharp
Camera Resolution	420 TV Lines
Frequency	Wired
Channel	2
TV System	PAL/NTSC
Dimensions	178(L) x 120(H) x 28(D)mm



Product may vary slightly to one shown.



	Cat.	Qty 1+	Qty 2+	Qty 4+
Reversing Camera with 7" Display	QM-3742	\$249.00	\$225.00	\$198.95
5m Camera Extension Lead	QM-3743	\$9.95	\$8.75	\$7.75
Spare Camera	QM-3745	\$129.00	\$115.95	\$102.95

WIRED REVERSING CAMERA KITS (CONTINUED)

REVERSING CAMERA WITH 5" LCD MONITOR - WIRED

An all-in-one reversing camera kit with a 5" slimline LCD. The kit includes a powerful suction mount bracket that allows you to swivel the vertical angle of the screen through a 90 degree range and a tiny reversing camera. Once activated, the LCD shows a distance overlay graphic to help you judge the proximity to an object. The screen docks securely in the supplied bracket, from which it draws its power and video through a mini USB 2.0 port.

For security purposes you can easily remove the screen from the bracket and pop it in your glove box so as not to tempt potential thieves. An easy to setup and affordable car and truck reversing camera solution.

Specifications	QM-3741
System specification	5" LCD
Connector	Mini USB 2.0
Dimensions	
LCD	127(L) x 82(W) x 15(D)mm
Bracket	133(H) x 65(Dia)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Reversing Camera with 5" Display	QM-3741	\$199.00	\$178.95	\$158.95

REVERSING CAMERA WITH SENSORS & 3" LCD MONITOR - WIRED

A complete automotive reversing solution! This unit integrates 4 ultrasonic sensor as well as flush mount low light wide angle reversing camera. Information and images are displayed through the 3" LCD Monitor. Parking assist lines are overlaid and digital distance indication is displayed on the screen. Audible indication can be set on either voice or beep alert or both. Monitor displays time and date when not in reverse mode. A truly accurate and reliable reversing system that will save you time, money and stress of unfortunate reversing accidents.

- 3" TFT LCD monitor with parking assist lines
- OSD menu
- Flush mount or micro-tab camera available
- Shock, vibration and water resistant camera
- PAL or NTSC mode available
- Accurate digital distance and clear rear view shown on the monitor
- Audible warning and voice warning (optional), volume adjustable
- Self-test function

Specifications	LR-8870
Power	12VDC
Screen	93(W) x 62(H) x 24(D)mm
Camera	33(L) x 20(Dia)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LR-8870	\$149.00	\$133.95	\$118.95

REVERSING & SIDE CAMERAS

FLUSH MOUNT MINI WATERPROOF CAMERA FOR CARS OR TRUCKS

Designed for use in vehicles to give drivers a clear view of car or truck blind spots. Reversing into tight spots, or parking in low light underground car parks is fraught with obstructions and potential accidents. Park your car with ease and avoid costly repair bills. Installation is very simple with the supplied 6m length wiring loom and hole saw drill bit.



Specifications	QC-3530
Sensor	PC7070
Resolution	420 TV lines
View Angle	120°
Minimum Illumination	0 Lux
IP Rating	IP67
Video out	1Vp.p. 75 ohm
Power Supply	9-12VDC
Operating temperature	-20 - +75 °C, RH95 max.
Dimensions:	18.5(Dia.)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
420TVL CMOS	QC-3530	\$49.95	\$44.90	\$39.90

FLUSH MOUNT CCD REAR VISION CAMERA

Utilising a CCD sensor for better image quality and low light performance. This waterproof IP67 reversing camera will provide clear video stream to avoid any potential accidents when reversing. It is designed to mount flush on even surfaces. Supplied with a 6m wiring loom and a size specific hole saw drill bit for that clean and professional installation.



Specifications	QC-3534
Sensor	PC7070
Resolution	420 TV lines
View Angle	120°
Minimum Illumination	0.5Lux
IP Rating	IP67
Video out	1Vp.p. 75 ohm
Power Supply	9-12VDC
Operating temperature	-20 - +70 °C, RH95 max.
Dimensions	26(Dia.)mm including bezel



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
420TVL CCD	QC-3534	\$99.95	\$89.95	\$79.95

COLOUR CCD WIDE ANGLE WATERPROOF REAR VIEW CAMERA

A camera designed to assist drivers reversing their vehicles. The tiny camera is easily mounted with the attached mounting bracket and screws. Ideally it should be fixed to an area above your rear licence plate, or any area other suitable nearby area. The wide angle lens and minimum illumination of 0.5 Lux will give you a more than adequate view of potential hazards behind your vehicle. Supplied with a 6m wiring and video loom cable.



Specifications	QC-3532
Sensor	PC7070
Resolution	420 TV lines
View Angle	120°
Minimum Illumination	0.5Lux
IP Rating	IP67
Video out	1Vp.p. 75 ohm
Power Supply	8-12VDC
Operating temperature	-20 - +75 °C, RH95 max.
Dimensions	22(W) x 15(Dia.)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
420TVL CCD	QC-3532	\$49.95	\$44.90	\$39.90

BUS / TRUCK CAMERA WITH INFRARED LEDS - CCD

The camera housing is constructed using Tough aluminium alloy and equipped with a black metal shield which helps deflect sun glare, rain and Dust. It is shock and vibration resistant and fitted with Infrared LEDs for night illumination. It is IP67 rated and suitable for heavy duty applications such as trucks, buses, RV's and caravans.



Specifications	QC-3536
Sensor	Sharp 1/4 CCD
Resolution	420 TV lines
View Angle	120°
Minimum Illumination	0.5Lux
IP Rating	IP67
Video out	1Vp.p. 75 ohm
Power Supply	12VDC
Operating temperature	-20 - +70 °C, RH95 max.



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
420TVL CCD	QC-3536	\$99.95	\$89.95	\$79.95

REVERSING CAMERAS & TRACKING

REVERSING & SIDE VIEW CAMERAS (CONTINUED)

SURFACE MOUNT SIDE VIEW / FRONT VIEW CAMERA

A popular reversing camera solution that securely mounts on your vehicle via a threaded stalk. No need to drill massive holes on your vehicles panels. Fog and shock resistant, it also features a 170° wide angle lens. Supplied with Screws and 3M® glue for simplified installation. Incorporates, a 600mm power lead and a 6m wiring and video loom.

NEW
2015



Specifications	
Sensor	PC7070
Resolution	420 TV lines
View Angle	170°
Minimum Illumination	0.5Lux
IP Rating	IP67
Video out	1Vp.p. 75 ohm
Power Supply	9-12VDC
Operating temperature	-20 - +75 °C, RH95 max.

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
420TVL	QC-3538	\$99.95	\$89.95	\$79.95

MEGA WIDE VIEW REAR VISION CAMERA

This unit simply mounts on any flat surface through an 18mm hole (A hole saw bit is supplied). Even though the camera itself is IP68 rated, it would be best to mount the camera as high as possible to avoid dirt and mud.

- Unbelievable 180° view angle. NOT fish eye!
- Normal/mirror image switchable
- Will work as all round side view camera
- Water resistant

Specifications	
Resolution	480 TV lines
Video out	1Vp.p. 75 ohm (Ok for the yellow video input of a monitor)
Lens	f=3.6mm, F=2.0
Back light control and white balance	Automatic
Operating temperature	-20 - +70 °C
Camera dimensions	22(Dia.)mm including bezel



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+
480TVL	QC-3520	\$129.00	\$115.95

BUS / TRUCK CAMERA WITH INFRARED LEDS

At times, anonymity breeds disobedience and places like buses can become a haven for anti-social behaviour. Littering and vandalism can affect the environment for everyone. This tough unit can be firmly mounted inside as a surveillance camera or outside as a reversing camera. The camera is fitted to a solid bracket that can be rotated in a vertical motion for the optimal view. An RCA composite video and audio connection are fitted for compatibility with most in dash and security LCDs.

- Infrared LEDs will allow night vision so nothing will escape the cameras view.

Specifications:	
Sensor resolution (H x V pixels)	510 x 492
Horizontal resolution (TV lines)	420 TV Lines
Minimum illumination	0.3 lux
Power supply	12VDC
IP Rating	IP67
Lens angle	80°
Dimensions (including bracket)	73(L) x 45(W) x 53(H)mm



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
420TVL	QC-3519	\$129.00	\$115.95	\$102.95

GPS TRACKING DEVICES

SOLAR RECHARGEABLE GSM/GPS TRACKER

Track bus/truck/taxi fleets, or use it for your own cars security or other covert purposes.

This robust tracker features a GPS and GSM module for greater tracking flexibility. When GPS is not available (underground car parks etc) it will failover to GSM. There are several ways vehicle location and information can be viewed, these include through the www.responsegps.com website, calling the device, or SMSing the device a specific code. Variations of this SMS code will return either a Google® Map link with coordinates, or specific vehicle attributes such as speed, direction, latitude/longitude as well as battery life of the actual tracker. Low battery information will be sent via SMS to an authorized phone number.



NEW
2015

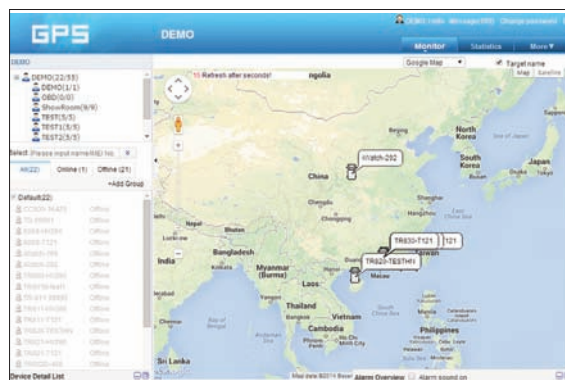
The website tracking portal allows for a myriad of statistics to be viewed. On initial entry there is a large Google® Map display with icons of all your tracking devices. Drilling further into the settings will show geofencing entry and departure times, vehicle mileage, fuel consumption, overspeed, and more. Many of these statistics can be exported to an excel file for import into your local database.

Settings on the tracking device can be altered with specific SMS codes such as toggling shock mode (when vehicle moves, data begins uploading to server), geofencing alarm, timer mode (which specifies a time interval when data should be sent), and numerous other setting such as resetting the device.

- Real time upload to www.responsegps.com website
- Geofencing, mileage, overspeed
- iPhone® and Android® app available
- 5VDC
- Can be recharged with attached solar panel or cigarette light plug (included)
- Locate precision: 10-20m
- Uses 2G GSM network and uploads through GPRS (not compatible with CDMA or 3g WCDMA / CDMA2000)
- Built-in 4000mAh battery
- Dimensions: 130(L) x 55(W) x 28(D)mm



1
YEAR WARRANTY



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
GMS/GPS Solar Rechargeable Tracker	LA-9015	\$279.00	\$255.00	\$225.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$119.00
QM-3752



7" 12V MONITOR

P247

FROM
\$129.00
QM-3761



9" 12V MONITOR

P247

FROM
\$199.00
QM-3874



9" 12/24V MONITOR WITH HDMI

P248

GPS TRACKING DEVICES (CONTINUED)

GPS/GSM TRACKING DEVICE FOR CARS, BOATS & TRUCKS

Locate and track the whereabouts of your vehicle in real time via the Internet on a computer or Smartphone. The device is easy to install with only 2 - 4 wires to connect. Insert a GSM Sim card (not included) and hide the device away on a metal surface or carpet using the included hook-and-loop adhesive. It works by sending the vehicle's GPS coordinates via the GSM network to the free online tracking service, which shows the location on Google® Maps. It can also SMS longitude and latitude coordinates to up to 3 mobile phones, as well as alerts when vehicle exits a pre-determined area or exceeds pre-set speed.

Other features include an engine kill function to remotely disable the petrol pump, and movement sensor to extend battery life. An SOS/Panic button is also supplied which can send an SMS to the pre-programmed mobile phones. The built-in rechargeable Li-ion battery will keep the device functioning for up to 4 days when power is disconnected, which could help you locate the vehicle should it have been stolen and abandoned.

There is no installation or on-going tracking charges. You only pay for the GSM sim card and service. Supplied with wiring loom, installation and operation manual.

- Smartphone app available on iTunes® & Google® play
- Real time upload current location to website
- Turn off car engine by Internet platform or SMS for Anti-theft
- Listening sound around tracker with silence by SMS or platform.
- No platform Service charge (Our free tracking platform)
- SIMCOM GSM module (Quad band)
- Upload interval is 30 seconds
- Built in shock sensor to control GPS on off to extend battery life
- Shock sensor can be used as car shock & movement alarm
- Website shows history tracking
- Platform uses free Google® Maps
- Send alert when vehicle exits a restricted area
- Send alert when vehicle exceeds the restricted speed
- Power supply disconnect alarm



Vehicle shown on tracking website



Specifications	LA-9011
GPS Channels	32
Locate Accuracy	5-10m
GPS Start Time	1sec (Hot start), 36sec (Cold start)
Standby current	1 - 2mA
Tracking current	35mA
Operating voltage	12 - 32VDC
Internal Battery	800mAh Li-ion
Unit dimensions	68(L) x 48(W) x 20(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
GSM/GPS Tracker	LA-9011	\$159.00	\$142.95	\$126.95

OBD II GSM/GPS TRACKING DEVICE

A multi-purpose GPS tracking device for auto enthusiast diagnostics, fleet management or vehicle security. This clever device connects and powers directly from the vehicle's OBD-II port and can SMS you DTC Trouble codes directly from your cars computer, assisting you to diagnose vehicle issues remotely or from the seat of your car. With the use of an activated SIM card (not included) data can be transmitted over the GSM network and viewed online using a web browser. View vehicle position on Google® Maps, speed, movement. Smartphones can also be alerted when the car drives outside a pre-set boundary, called geo-fence. There are no installation or on-going tracking charges. You only pay for the GSM SIM card and service. Up to 28 can be used simultaneously if you have a fleet of vehicles.

Note: Most post 1998 vehicles will feature an OBDII port

- Plug and play
- OBD-II plug interface
- 3D G-force sensor
- Fuel consumption
- Over speed alarm & alert
- Driving behaviour
- Powered directly from OBD-II port

Specifications	LA-9014
Data Usage	0.07KB every 30 second upload interval
Normal operating temperature	-20 to +55°C
Restricted operating temperature	-35 to +70°C
GSM Frequency	850/900/1800/1900 MHz
GSM & GPS Antenna	Built-in
GPS Channels	32
Locate Accuracy	5 - 10m
GPS Start Time	1sec (Hot start), 36sec (Cold start)
Standby current	1 - 2mA
Tracking current	35mA
Operating voltage	12 - 32VDC
Charge voltage	5V
Battery	800mAh Li-ion
Dimensions	55(L) x 25(W) x 50(H)mm, weight: 80g



	Cat.	Qty 1+	Qty 2+	Qty 4+
GSM/GPS Tracker	LA-9014	\$299.00	\$269.00	\$239.00

PERSONAL GSM/GPS TRACKING DEVICE - RECHARGEABLE

Locate and track the whereabouts of a person, personal belonging or vehicle in real time via your mobile phone. The tracker is rechargeable and compact so it can fit unobtrusively inside a pocket, handbag, luggage, vehicle, etc. To operate, simply insert a GSM Sim card (not included), charge and turn on. It then send its GPS coordinates via the GSM network to your mobile phone which can be viewed on Google® Maps. Latitude, longitude, speed, direction, date & time, and battery condition or a Google® Maps website link can be sent at any time by sending an SMS from your mobile phone to the tracker. You can also set it to SMS details once movement is detected, when the tracker is in a pre-determined area, over a preset speed, or when the battery is getting low.

A microphone and speaker in the tracker also allows you to dial in to listen to sounds around the tracker, and one of two phones can be called from the tracker for two way communication. To top of the rich list of features is a SOS button that sends help information to up to three pre-set phone numbers. A USB cable and car charger is supplied to recharge the built-in rechargeable Li-ion battery, which will keep the tracker functioning for up to 3 days on standby.

- Listen to audio around tracker
- SIMCOM 340D GSM module (Quad band)
- 60 second auto tracking report mode option
- GPS interval power saving mode to extend battery life
- SMS locate
- Monitor function
- Calling function
- SOS function
- Over Area alert (Geo-fence)
- Over speed alert
- Low Battery alert

Specifications	LA-9013
GPS Channels	32
Locate Accuracy	10 ~ 20m
GPS Start Time	1sec (Hot start), 36sec (Cold start)
Standby current	<10mA
Tracking current	50mA
Charge voltage	5V, 300mA
Internal Battery	950mAh Li-ion
Unit dimensions	61(L) x 42(W) x 11(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
GSM/GPS Rechargeable Tracker	LA-9013	\$159.00	\$142.95	\$126.95

CAR SECURITY

STEELMATE ENTRY LEVEL CAR ALARM WITH VOICE FUNCTION

An affordable car alarm that features voice feedback on alarm status and operational parameters such as open doors etc.

What you get:

- Electronic black box controller
- Shock sensor, Ignition cutout relay
- Speaker siren
- Wiring looms
- Bonnet pin switch
- Car charger for the remote controls
- Extra circuits for fuel and ignition cutout
- 2 x Code hopping remote control units, one with a built in torch!

Kit includes:

- Metallic water resistant 5-button transmitters
- Dedicated boot release button
- Voice warning (ON / OFF)
- Valet mode
- Anti-hijacking, emergency call & locating
- Emergency override



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Car Alarm	LA-9003	\$109.00	\$89.95	\$79.95
Spare Remote	LA-9004	\$37.95	\$33.95	\$30.45
Spare Remote Car Charger	LA-9021	\$9.95	\$8.75	\$7.75

CONTROL LOCKING

SLAVE DOOR LOCK ACTUATOR

Door lock actuator used on passenger doors. Durable, waterproof and dustproof with Japanese mechanics, and supplied with universal mounting hardware. Wiring not included.

- Japanese Mabuchi motor
- Original Nylon and POM
- PTC overload protection
- Life cycle: 100,000 times
- Push/Pull force: > 4.0 kg
- Input voltage: 9 - 16VDC



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LR-8813	\$12.95	\$11.35	\$10.35

MASTER DOOR LOCK ACTUATOR

Door lock actuator for Driver's door. Includes microswitch output to activate power lock relay LR-8818. Durable, waterproof and dustproof with Japanese mechanics. Supplied with universal mounting hardware. Wiring not included.

- Japanese Mabuchi motor
- Original Nylon and POM
- PTC overload protection
- Life cycle: 100,000 times
- Push/Pull force: > 4.0 kg
- Input voltage: 9 - 16VDC



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LR-8815	\$14.95	\$13.35	\$11.70

4 DOOR POWER LOCK KIT

Add that touch of luxury to your car with this low cost 4 door central locking kit, so when you unlock the drivers door the other three doors will also unlock. It can be connected to car alarms with a negative triggering locking output, or used with our LR-8839 remote controller for keyless entry.

- Supplied with 1 master, 3 slave actuators, control relay, hardware and wiring loom.



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
4 Door Power Lock Kit	LR-8812	\$39.95	\$35.90	\$31.90

REMOTE CONTROLLED CAR CENTRAL LOCKING SYSTEM

Upgrade to a remote keyless car entry with this system. On rainy or windy days where you need a quick entry, unlock your doors as you approach the car. The system is easy to install with 2 keyfob and comes with two remote keyfobs.



SPARE REMOTE CONTROL

Spare Remote Control for LR-8839 Central Locking System. Supplied with one 12V battery (For replacement batteries use our SB-2422.)

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Centre Locking System	LR-8839	\$49.95	\$44.90	\$39.90
Spare Remote	LR-8837	\$19.95	\$17.70	\$15.70

4 DOOR REMOTE CONTROLLED CENTRAL LOCKING KIT WITH KILL SWITCH

Lock and Unlock your car doors from a distance without having to fumble around with keys. Includes outputs to flash the indicators for visual confirmation, as well as outputs for sunroof and window closers (where fitted). An additional security button can be installed to cut off the fuel pump to prevent the car being stolen.



Supplied with 1 master actuator, 3 slave actuators, and control relay, two remotes with batteries, kill switch, hardware and wiring loom.

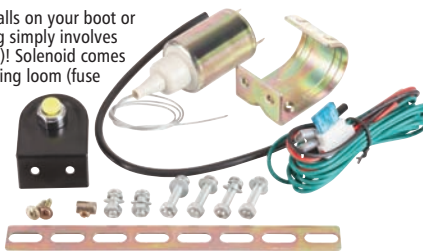
- Working voltage: 9 - 16VDC
- Frequency: 433.92MHz



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LR-8842	\$84.95	\$76.50	\$67.95

CAR BOOT / HATCH RELEASE

This great little gadget installs on your boot or hatch lock so that unlocking simply involves pressing a button (supplied)! Solenoid comes with mounting bracket, wiring loom (fuse included), dash mount pushbutton switch and installation instructions.



- Solenoid Unit (including bracket): 95(L) x 43(D) x 58(H)mm
- Switch (on L bracket): 50 (H) x 44(W) x 40(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LR-8834	\$39.95	\$35.90	\$31.90

ALARM STICKERS

LARGE ALARM STICKER

For trucks, caravans, houses, offices and factories. Where a larger and more prominent deterrent sticker is required.

- Sticks to outside of window
- Measures: 120 x 80mm



FOR OTHER CAR & GENERAL STICKERS SEE PAGE 439

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Each	LA-5102	\$2.95	\$2.60	\$2.30

TAMPER SWITCHES

TAMPER (PIN) STYLE

Low cost spring loaded switch, simply make to frame (or earth) when pin is released i.e. by operating car or cabinet door, etc. 57mm overall, 12mm pin travel.

- Bullet connector termination



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Pkt 2	LE-8775	\$5.95	\$5.25	\$4.75

METAL TAMPER (PIN) STYLE

Especially good for car bonnets, this heavy duty pin switch is nickel plated for protection from corrosion in hostile environments. The plunger is plastic and can be cut to suit the required length/depth. Supplied with locking nuts and star washer. The bezel's mounting depth is also adjustable. Termination is via a 6.4mm spade lug.



Specifications			
Length (main body)	38mm	Including plug & lug	70mm
Shaft diameter	7.75mm	Fascia nut size	11mm
Locking nut size	12mm	Travel (max)	13.5mm.

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Pkt 2	LE-8776	\$7.95	\$6.95	\$6.25

METAL FASCIA INSET PIN SWITCH

Inset pin switch with plated metal fascia. Suitable for many cars as a replacement door switch. The sturdy plunger can be cut to required length. Termination via right angle 6.4mm spade lug.

Specifications	
Fascia	34.5 x 16.5mm
Pin	27(L) x 8(dia)mm
Depth behind fascia	15mm (not inc lug & pin)
Overall depth	51mm
Travel (max)	8mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Pkt 2	LE-8777	\$7.95	\$6.95	\$6.25

VAN SLIDING DOOR STYLE

Double action sliding door switch, primarily designed for van doors and tailgates. Supplied with rubber mounting plates, screws, template stickers and installation instructions. Contacts are rated at a massive 20A @ 12V.



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12VDC 20A	LE-8779	\$18.95	\$16.95	\$14.95

SIRENS

WATERPROOF SIREN - 90DB

A waterproof siren suitable for harsh environments. Suitable for cars, boat and truck applications.

Specifications	
Operating voltage	12V - 24VDC
Sound output	>90dB
Dust and waterproof rating	IP66
Termination	Spade lugs
Dimensions	40(Dia.) x 50(L) x 34.5(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-8901	\$12.95	\$11.35	\$10.35

MINI REVERSE WARNING SIREN 12/24VDC

Extremely easy to install on 12 or 24V vehicles. Beeps when power is applied, and features a mute function that you can connect to the parker lights to mute the siren at night time if desired.

Specifications	
Operating voltage	9-30VDC
Current consumption	<200mA
Sound output	>90dB
Dust and water resistance rating	IP65
Termination	Fly leads
Mounting hole	6.5mm
Dimensions	55(Dia.) x 37.5(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-8904	\$9.95	\$8.75	\$7.75

ELECTRONIC SIREN

Small sized siren. It's much easier to mount a small siren in a cramped engine bay!



Specifications	
Operating voltage	12VDC
Sound output	125dB.
Power rating	20 watts
Current draw	1.3 Amp.
Size	67(L) x 59(W) x 70(H)mm including brackets.

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-8908	\$14.95	\$13.35	\$11.70

SIX-TONE CAR ALARM SIREN WITH BACK-UP BATTERY

This compact siren has a rechargeable back-up battery pack mounted inside the unit, so if the wires are cut by a thief, the siren will sound and the only way to disable the unit is to turn it off with a key. Internal batteries are kept on trickle charge so they are always fully charged.

- Supplied with 2 keys.



Specifications	
Power	20W
Voltage	12VDC
Impedance	10 ohm
Output	118dB.
Size	100(L) x 61(W) x 57(D)mm including brackets.

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-8912	\$19.95	\$17.70	\$15.70

WATERPROOF SIREN - 12V

Siren suitable for car, home or boat alarms. Features an ambient background level control which changes the volume between 75 and 97dB depending on the environmental noise, using the siren driver as a sense microphone to control the output sound level.

Specifications	
Operating voltage	12-24VDC
Sound output	75 - 97dB
Dust and waterproof rating	IP66
Termination	Fly leads
Dimensions	101(W) x 72(H) x 42(D)mm including mounting bracket



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-8903	\$34.95	\$31.45	\$27.90

STROBES

WATERPROOF LED STROBE LIGHTS

LED strobes for security, alarm or emergency use. Low current consumption units are fully sealed and waterproof; suitable for outdoor alarm applications. Mounts with 2 x 5mm bolts.



- 12VDC operation.
- Measures: 70(Dia) x 45(H)mm

↑	Colour	Cat.	Qty 1+	Qty 4+	Qty 8+
	Blue	LA-5326	\$19.95	\$17.70	\$15.70
	Red	LA-5327	\$19.95	\$17.70	\$15.70
	Amber	LA-5328	\$19.95	\$17.70	\$15.70

12VDC LED STROBE LIGHT WITH MAGNETIC BASE FOR CARS

Designed to be mounted on to the roof for maximum visibility. Moulded curly cord with cigarette plug for power.

Note: For off-road use only.

- 12VDC
- 60 super bright, high intensity LEDs
- Cigarette lighter plug for power
- Heavy duty magnetic base for secure mount
- Dimensions: 95 (H) x 130 (Dia.)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	ST-3295	\$29.95	\$26.90	\$23.70

DASH MOUNT FLASHING LED -12V

With a metal bezel and a very bright 5mm LED, this flasher is excellent as a fake car alarm. Installed on your dash, thieves can be led to believe that your car is alarmed - especially combined with our car alarm stickers (Cat. LA-5104).

Specifications	
Bezel Dimensions	30(D) x 7(W)mm
Face Diameter	11mm
Operating Voltage	12V
Wire Lead Length	400mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	LA-5082	\$6.95	\$6.25	\$5.50

KEYFOBS / CONTROLLERS

KEYFOB LEARNING REMOTE 250 - 450MHZ

A wider frequency range that includes some automatic garage door openers. Will learn up to 4 different codes and make your life a little easier by letting you control all your alarms with just one fob. A typical situation could be using the same remote for your car, your partner's car and the automatic garage door with a spare button for the house alarm when you get it. Frequency: 250MHz to 450MHz.



- Not suitable for code hopping alarms

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Keyfob Remote	LA-8992	\$45.00	\$40.45	\$35.95

SINGLE CHANNEL KEYFOB REMOTE

Multi-purpose remote control keyfob for garage doors, lights auto gates etc. It operates in the 27MHz band on an FM signal. The built-in microcontroller uses the latest technology allowing for easy setup and installation while providing maximum security and reliability.



- Battery status LED
- Up to 200m range

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Keyfob Remote	LR-8847	\$54.95	\$49.45	\$43.90

ONE CHANNEL HAND CONTROLLER/TRANSMITTER

For over 15 years now, one brand of remote control has dominated the Australian & New Zealand markets for remote controls for garage doors, motorised gates, lighting, alarms etc. This unit, called the FMT 101, 102 or 103, is a 27MHz crystal controlled NBFM (Narrow band frequency modulated) device. It is coded with a 12-way DIP switch. There are over a million in service in Australasia. They are very reliable but they do wear out, drown, go walkabout or simply get lost. We now stock the most popular single channel unit. This will save ordering one through the garage door people who charge a fortune for replacements. This is the latest version of the most common operating transmitter in use in Australia/New Zealand today. It operates (always has) on 27.145MHz & requires a 216-type 9V cell. An alkaline battery is recommended but is not included. The controller is custom coded via a DIP-switch which is accessible from the battery cover.



- Measures 96(H) x 55(W) x 20(D)mm
- Weight: 72g excluding battery

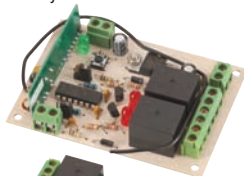
↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Handheld Controller	LR-8827	\$64.95	\$58.50	\$51.95

MULTI CHANNEL REMOTE CONTROL RELAY BOARDS

Add remote control functions to a new project or existing installation with these handy remote control relay boards. Available with 2 or 4 channels, each output relay is controlled by a separate button on the key fob controller. Each channel can be set to momentary or latching mode allowing you to customise the setup to suit your application. Operating on the robust 433MHz band the key fob remotes work over distances up to 40m and feature rolling code transmitting for added security.

- Selectable momentary or latching mode for each channel
- Transmission frequency: 433MHz
- Transmission range: 40m max
- Operating Voltage: 12VDC
- Relay contact rating: 28VDC 10A max / 250VAC 5A max

LR-8855



2 CHANNEL REMOTE CONTROL RELAY BOARD

- Current draw: 50mA
- Board dimensions: 85(L) x 61(W) x 20(H)mm
- Remote dimensions: 51(L) x 34(W) x 13(D)mm

Cat. LR-8855

4 CHANNEL REMOTE CONTROL RELAY BOARD

- Current draw: 80mA
- Board dimensions: 90(L) x 73(W) x 20(H)mm
- Remote dimensions: 63(L) x 40(W) x 13(D)mm

Cat. LR-8857

LR-8857



LR-8856

LR-8858



Cat. LR-8858

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
2 Channel RC Relay Board	LR-8855	\$44.95	\$40.45	\$35.90
2 Channel Keyfob	LR-8856	\$14.95	\$13.35	\$11.70
4 Channel RC Relay Board	LR-8857	\$59.95	\$53.95	\$47.90
4 Channel Keyfob	LR-8858	\$19.95	\$17.70	\$15.70

RELAYS

UNIVERSAL LED FLASHER RELAYS

Specifically designed to work with replacement low current LED indicator lights which may "hyper flash" when used with your cars standard flasher relay. This high frequency flashing will burn out the globe quicker. The minimum load is negligible (0.02A). Some cars will even display a burnt out bulb indicator even though it's working fine, this unit will remedy that issue.

- Nominal voltage: 12VDC
- Operating voltage: 11VDC-15VDC
- Flashing frequency: 90 times/minute +/-10%
- Silent operation
- Dimensions: 40(H) x 28(W) x 28(L)mm



UNIVERSAL 2-PIN LED FLASHER RELAY

Switch current: 0.02A-10A
SY-4016

JAPANESE CAR 3-PIN LED FLASHER RELAY

Switch current: 0.02A-20A
SY-4018

SY-4018



L = Load
B = 12V in
E = Ground

SY-4016



L = Load
B = 12V in

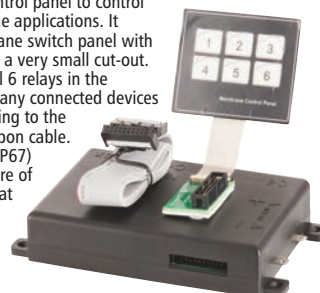


↑	Type	Current	Cat.	Qty 1+	Qty 4+	Qty 10+
	2 Pin	10A	SY-4016	\$14.95	\$13.35	\$11.70
	3 Pin	20A	SY-4018	\$14.95	\$13.35	\$11.70

FOR OUR FULL RANGE OF RELAYS,
REFER TO PAGES 118 & 122

6 WAY MEMBRANE SWITCH PANEL WITH RELAY BOX

An ultra compact 6-way 12VDC touch control panel to control devices in automotive, camping, or marine applications. It features an ultra thin and flexible membrane switch panel with almost no mounting depth requiring only a very small cut-out. The 6 buttons on the switch panel control 6 relays in the separate control box for switching on/off any connected devices with ease, with the switch panel connecting to the control box with an included 1m long ribbon cable. This gives you a completely waterproof (IP67) switch panel, with all the wiring taken care of behind your dash/panel, resulting in a neat and unobtrusive 6-way switch interface.



- IP67 rating on the switch panel
- Built-in resettable fuses

Specifications	
Max current	10A per channel, 35A total
Touch Panel Dimensions	70(L) x 63(W) x 1(H)mm
Membrane Control Box Dimensions	135(L) x 90(W) x 33(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Switch Panel with Relay Box	SP-0900	\$99.95	\$89.95	\$79.95

SEE OUR NEW RANGE OF SWITCHES
& ETCHED COVERS ON PAGE 98.

UNIVERSAL RELAY WIRING KIT WITH SWITCH

A universal relay wiring kit for fitting various 12V devices to your car, such as our LED driving lights SL-3920/SL-3922. It is a complete "ready to use" harness with fused battery connections, horn relay, in-cabin toggle switch, and waterproof 2 pin connection with 2m of extra wires to connect to the 12V load you want to control. The cables are fully protected inside a loom tube. It also includes a short "double adaptor" lead so that you can fit two or more of these wiring harnesses and control them with the one switch - for example if you want to control a pair of SL-3920 LED driving lights.



- Max current rating: 7A (80W)



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Wiring Kit	SY-4079	\$33.95	\$29.45	\$26.45

FOR A CIRCUIT TO SHOW YOU HOW TO MAKE AN
ORDINARY RELAY LATCH SEE PAGE 119

CAR DISPLAYS

HEADS UP DISPLAY (HUD) GPS SPEEDOMETER

An easy-to-read and fully featured GPS speedometer that displays your car's speed on the windscreen as you drive, so you can keep your eyes on the road instead of down on the dashboard. To operate, simply plug it into the 12 volt cigarette lighter socket and place on the dashboard using the adjustable bracket and double sided tape. Once it connects with satellites the speed will display.

- Includes 12V cigarette lighter lead
- KPH & MPH
- Dimensions: 140(L) x 75(W) x 25(H)mm

Note: In spite of the accuracy, errors may occur due to environmental conditions and we accept no liability or responsibility whatsoever for any consequences arising from the use of this device.

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
HUD GPS Speedometer	LA-9023	\$99.95	\$89.95	\$79.95

SELF-POWERED LED PANEL METERS

Simple and easy to install self-powered meters with voltage or current display. The voltmeter has a simple 2-wire connection, and the current meter has 4-wire connection with an included current shunt. Auto zero calibration and easy to read red LED display. Give your next project a truly professional look. Perfect for automotive, caravan or 4WD use. Cutout size 42 x 23mm.

- Easy installation
- Automatic polarity sensing
- Auto zero calibration
- Self powered

LED VOLTMETER 0 - 30V DC

Specifications	QP-5586
Power requirements	8 - 30VDC
Measurement range	8-30VDC
Maximum display count	999
Sample frequency	400mS

Cat QP-5586



LED AMMETER 0 - 50A DC

Specifications	QP-5588
Power requirements	8 - 30VDC
Measurement range	0-50A
Maximum display count	1999
Sample frequency	400mS

- Current shunt included

Cat QP-5588



Note! When connecting the ammeter QP-5588 it is essential that the wiring instructions provided with the product are followed, or the meter may be destroyed.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
0 - 30VDC	QP-5586	\$24.95	\$22.35	\$19.70
0 - 50ADC	QP-5588	\$39.95	\$35.90	\$31.90

AUTOMOTIVE TEST EQUIPMENT

LOW VOLTAGE CIRCUIT TESTER 6, 12, 24 VOLTS

Looks like a neon test screwdriver but instead of a blade on the end this tester has a probe and a 28" lead which clips to ground.

- Suitable for 6/12/24 volts for use on cars, trucks, boats, etc.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2049	\$3.95	\$3.45	\$3.15



SEE WIRELESS TESTER PG 232

SPEEDO CORRECTOR MODULE FOR CARS

When you modify your gearbox, diff ratio or change to a large circumference tyre, it may result in an inaccurate speedometer. This module alters the speedometer signal up or down from 0% to 99% of the original signal. With this improved model, the input setup selection can be automatically selected and it also features an LED indicator to show when the input signal is being received.

Specifications	
Power	12VDC
Dimensions	63(L) x 46(W) x 25(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0376	\$44.95	\$40.45	\$35.90



FUEL MIXTURE DISPLAY MODULE FOR CARS

This very simple module will allow you to monitor the fuel mixtures being run by your car. This type of sensor is also known as an E.G.O. (exhaust, gas, oxygen) monitor. You can use it as a tuning tool, to help in vehicle modification or simply to see the behaviour of the engine control module. Indication is via 10 LEDs to show mixtures rich, lean and normal. The circuit connects to the EGO sensor mounted in the exhaust manifold and the cars battery.

Specifications	AA-0374
Power	12VDC
Dimensions	81(L) x 51(W) x 22(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Fuel Mixture Display Module	AA-0374	\$24.95	\$22.35	\$19.70



VERSATILE AUTOMOTIVE LED DISPLAY MODULE FOR CARS

This versatile module will allow you to monitor the battery voltage, the airflow meter, or oxygen sensor in your car. It features a 10 LED indicator that illuminates in response to the measured voltage so you can see if your O2 sensor is causing your car to run too rich or too lean. Preset 9-12V, 0-5V or 0-1V ranges, complete with fast response time, high input impedance and auto dimming for night time driving.

Specifications	AA-0375
Power	12VDC
Dimensions	81(L) x 52(W) x 21(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
LED Display Module	AA-0375	\$24.95	\$22.35	\$19.70



OBD2 (CAR COMPUTER) PLUG / MEMORY SAVER

Most modern cars engine systems are controlled by a computer (engine control unit). They adjust fuel/air mixture, ignition timing, and a range of other engine performance settings based off information they receive from a number of sensors plugged into your car (oxygen sensor, temperature sensors etc). When disconnecting your car's battery for simple maintenance, all of your cars computer settings will be wiped. Radio station settings, engine fault codes, keyless entry codes, will all be gone and the ECU will have to re-learn them or you will have to manually re-program them. That's where the memory saver comes in. Just connect the cigarette plug to a 12VDC source, such as a jump starter and the OBD2 port to your cars socket (commonly found under the steering wheel) to save the ECU settings.

- 16 pin OBD-II Connector
- Easy to read LED indicates connection
- Compatible with most post-1996 vehicles fitted with an OBD2 port
- Length: 1.5m

↑	Cat.	Qty 1+
OBD2 Plug	PP-2140	\$5.95



NEW LOW PRICE

CIGARETTE PLUG ALTERNATOR / BATTERY MONITOR

Having car batteries or alternators diagnosed and fixed can be unnecessarily expensive, both sit firmly in the realm of DIY. Replacing an alternator can cost up to \$300, when in fact all that may need to be replaced is a \$20 voltage regulator. This device will help you diagnose the source of your cars electrical problems and potentially save you a lot of money.

It simply plugs into your car's cigarette lighter socket and will present you with alternator and battery status. For full specifications see page 176.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Alternator/Battery Monitor	PP-2142	\$9.95	\$8.75	\$7.75



1 YEAR WARRANTY

12V CAR VOLTAGE, ALTERNATOR & TEMPERATURE DISPLAY

Plugs into the car's cigarette lighter socket to display the car's battery voltage and inside temperature. An audible and visual alarm can be set to trigger when the car's battery voltage dips too low, which could save you from breaking down in the middle of nowhere with a dead car battery. The display features a tri-coloured LED to show the battery status and electrical system status at a glance. Stylish modern design allows for easy dash mounting.

- Celsius or Fahrenheit temperature display
- 12VDC

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Temperature Display	XC-0117	\$39.95	\$35.90	\$31.90



1 YEAR WARRANTY

AUTOMOTIVE TESTERS (CONTINUED)

OBD2 BLUETOOTH® ENGINE CODE READER

Modern car engines are controlled by computers which regulate engine performance. Sensors are connected to major components which constantly send data to the computer which then adjusts performance accordingly to ensure minimal emissions and optimal performance. Reading data from these computers helps mechanics pinpoint where problems may lie in car performance. You can also find out this information with this OBD2 bluetooth engine code reader. It connects to your OBD2 port and will immediately interpret the information in the ECU (enging control unit). You can use this information to find faulty sensors which adversely affect performance, see if cylinders are misfiring, see how hot your engine coolant is, view engine RPMs and much more. Diagnosing and fixing certain problems yourself can save a lot of time and money. It's also fascinating to see how much engine information is readily available in modern cars.



Suitable apps: Rev for iPhone®

See website for a list of supported vehicles. Even if your vehicle make is listed, this does not guarantee all features will be present.



Note: Due to the nature of this product we do not accept returns and refunds for faulty items. We only accept exchanges.

Viewable parameters *

- Vehicle Speed
- RPM
- Fuel Consumption
- Engine Coolant Temp
- Fuel Pressure
- Calculated Engine Load
- Throttle Position
- Intake Manifold Pressure
- Air Intake Temp
- Timing Advance
- Mass Air Flow
- Fuel Level
- Barometric Pressure
- EVAP System Vapor Pressure
- Fuel Trim
- Note: Not all measurements will be available in some cars

TECH TALK!

HOW IT WORKS:

1. Connect to OBD2 port (commonly found underneath right of your steering wheel)
2. Pair it with your smartphone, laptop, or tablet
3. Use the supplied software or app to monitor an array of engine parameters

↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
OBD2 Code Reader	PP-2145	\$69.95	\$62.95	\$55.95

3 - 28V PRO GRADE AUTOMOTIVE TESTER

This professional grade cordless voltage tester is designed for used on modern cars. The voltage tester detects from 3 to 28 volts. It will light up and buzz when positive voltage is detected. Made from rugged chrome metal construction it is safe to use with ECMs, air bags, sensors, transducers etc. The circuit tester does not require a ground wire or clip, so it is easy to check in hard to reach places. A probe is supplied with a V-Groove tip to make piercing wire insulation safe. N size battery included (replacement batteries use SB-2346).



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Auto Tester	QP-2212	\$15.95	\$14.35	\$12.70

CIGARETTE LIGHTER BATTERY MONITOR

Check the voltage output of your car's battery quickly and easily. Simply plug this handy voltmeter into the cigarette lighter socket and get an instant readout of the electrical system's voltage.

- Display resolution: 0.1V
- Accuracy: +/- 2%
- Operating voltage: 8 - 30VDC



↑	Cat.	Qty 1 +	Qty 5 +	Qty 10 +
Battery Monitor	QP-2220	\$19.95	\$17.70	\$15.70

DIGITAL TACHOMETER

This easy-to-use hand-held digital tachometer measures up to 99,999 RPM and features a large LCD, laser pointer, low battery indicator, and memory recall for the last displayed value, minimum value, and maximum value. It also features a DC socket for mains power (5VDC at 50mA). It can also be switched to measure either actual RPM or total revolutions.

Supplied with carry case and 600mm reflective tape marks.

- 5 Digit
- 99,999 RPM

Specifications	QM-1448
Display	2000 count
Test range	2.5 to 99,999 RPM
Basic DC accuracy	0.5%
Sampling	0.5 sec (over 120RPM)
Range select	Autorangeing
Detection distance	50 to 500mm
Power consumption	50mA approx.
Batteries	4 x AA batteries (included)
Dimensions	160(H) x 72(W) x 37(D)mm



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +	
	Tachometer	OM-1448	\$79.95	\$71.95	\$63.95

AUTOMOTIVE MULTI-FUNCTION CIRCUIT TESTER WITH LCD

Designed to test the electrical system of an automotive vehicle running on 12V or 24V. One of the great features is being able to activate components with positive or negative without using a jumper wire. To top it all off the easy to read LCD is backlit so it's perfect for the dark crevices of an engine bay. All the features of a brand name unit at a fraction of the price. For full specifications see our website.

- Works on 12 or 24V systems
- Dimensions: 240(L) x 78(H) x 40(W)mm



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Auto Tester	QM-1494	\$59.95	\$53.95	\$47.90

BATTERY, CHARGER & ALTERNATOR TESTERS

These handy devices quickly indicate the condition of your car or truck battery, charger or alternator. They use 3 LEDs to indicate battery and charge under engine on/engine off conditions. Compact and lightweight, they include 600mm leads with crocodile clips, and an inbuilt magnet to secure the unit while taking measurements.

- Dimensions: 120(L) x 33(W) x 20(D)mm



WE HAVE A LARGE RANGE OF AUTOMOTIVE/MARINE BATTERY CHARGERS ON PAGE 303

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
12VDC Tester	QP-2258	\$12.95	\$11.35	\$10.35

ALCOHOL BREATH TESTERS

Note: Readings taken with these devices are for reference only. In spite of its quality and accuracy, errors may occur due to operation or environmental conditions and we accept no liability or responsibility whatsoever for any consequences arising from the use of these devices.

ALCOHOL BREATH TESTERS

Check your blood alcohol content with these affordable pocket alcohol breath testers before getting behind the wheel. Easy one button operation; simply blow in the nozzle and within seconds it will display the reading on its backlight LCD. There is a compartment on the back of the unit to store up to 5 plastic nozzles. A small investment to ensure you retain your driving privileges and prevent potential accidents.

Two models to chose from.

Common features:

- Three kinds of unit conversion (%BAC / BAC / mg/L)
- Audible alert when measurement over preset level
- Auto power off
- Supplied with 5 mouthpieces - replacements available separately



ALCOHOL BREATH TESTER WITH LCD - QM-7304

Semiconductor based sensor.

Specifications	QM-7304
Detection Range	0.000 - 0.199% BAC
Accuracy	±0.010% BAC
Display	Digital LCD
Warm-up Time	<20s
Response Time	<5s
Power	Requires 3 x AAA batteries
Weight	68.5g (excluding batteries)
Dimensions	120(L) x 61(W) x 29(D)mm



ALCOHOL BREATH TESTER WITH LCD - QM-7306

Fuel cell sensor, which provides higher accuracy alcohol reading over the standard semiconductor sensor. This is the same technology widely used in law enforcement applications.

Specifications	QM-7306
Detection Range	0.00 - 4.00% BAC
Accuracy	0.004% BAC
Display	1.35" Digital LCD
Warm-up Time	<20s
Response Time	<5s
Power	Requires 3 x AAA batteries
Weight	50g (excluding batteries)
Dimensions	110(L) x 40(W) x 20(D)mm



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +	
	Alcohol Breath Tester	QM-7304	\$49.95	\$44.90	\$39.90
	Spare Mouth Pieces - Pack of 10	QM-7305	\$9.95	\$8.75	\$7.75

⬆	Cat.	Qty 1 +	Qty 3 +	Qty 6 +	
	Pro Fuel Cell Alcohol Breath Tester	QM-7306	\$99.95	\$89.95	\$79.95
	Spare Mouth Pieces - Pack of 10	QM-7307	\$9.95	\$8.75	\$7.75

EXTERNAL LIGHTS & SPOTLIGHTS

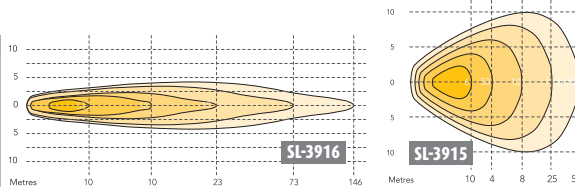
500 LUMEN IP68 SOLID MINI LED SPOT/FLOODLIGHTS

Amazingly bright, completely shock and waterproof, and unbelievably compact LED spot/floodlights that are an all-round solution for so many different applications. Use them as reversing lights or side lights on your 4WD, permanently mount them on your tinny as night fishing lights or nav lights, use them for deck lighting - we're sure you get the idea! Made from die cast aluminium alloy with an anodised polyester powder coat, 316 grade stainless steel hardware, a near unbreakable lexan polycarbonate lens, and featuring an IP68 rating and UV shielding, they are more than capable of handling whatever situation you throw them into. Operated from 10-36VDC, and available in either spot or flood beam patterns.

- IP68 waterproof
- Shock proof
- 50,000 hour life
- Instant ON/OFF

SOLD INDIVIDUALLY

Specifications	SL-3915/SL-3916
Beam pattern	Flood (SL-3915), Spot (SL-3916)
Beam distance	Flood 50m, Spot 145m
Lumen output	500
Equivalent halogen lamp	35W
Input current	0.3A (12VDC), 0.16A (24VDC)
Operating temp	-40° C - 60° C
Dimensions (mounted)	70(H) x 40(W) x 55(D)mm

NEW
LOW
PRICE

↑ Type		Lumens	Cat.	Qty 1+	Qty 2+	Qty 6+
Floodlight	Each	500	SL-3915	\$54.95	\$49.45	\$43.90
Spotlight	Each	500	SL-3916	\$54.95	\$49.45	\$43.90

720 LUMEN LED SPOT/FLOODLIGHTS WITH CREE® LED

A cost effective waterproof, dustproof and shockproof lights suited to the rough demands of 4WD or marine lighting applications. The low profile design and provided mounting clips allow you to make a group of these lights mounted as a straight light bar or stacked on each other to create a light panel.

- Housing: Durable alloy diecast
- Weatherproof Rating: IP67
- LED Life: Over 50,000 hours
- Voltage: 9 - 60V (10W)
- Input current: 0.6A (12VDC), 0.3A (24VDC)
- Dimensions: 51(W) x 51(H) x 61(D)mm
- Colour Temperature: 6000K
- Termination: Fly Leads



Side view

STACKABLE



SL-3938



SL-3939



SOLD AS A PAIR

↑ Type		Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+
Spotlight	Pair	720	SL-3939	\$79.95	\$71.95	\$63.95
Floodlight	Pair	720	SL-3938	\$79.95	\$71.95	\$63.95

1,450 LUMEN LED SPOT/FLOODLIGHTS WATERPROOF

Extremely bright waterproof LED spot and floodlights ideal for 4WD use. Each light features 9 x 3W Epistar LEDs that will blast out 1450 Lumens of white light onto the road and into the bush so isolated or remote areas are well lit. Feature die cast aluminium alloy housing with tough polycarbonate lens refractors that will protect the light from small stones. The LEDs will last for up to 50,000 hours which far exceeds that of regular halogen lights - No more blown globes!

- Mounting brackets included

SOLD AS A PAIR

Specifications	SL-3934/SL-3936
Beam distance	Spot: 230m, Flood: 125m
Waterproof	IP68
Current draw	12V (2.1A), 24V (1.1A)
Lumens	1450



Side view



SL-3934



SL-3936



↑ Type		Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+
Spotlights	Pair	1,450	SL-3934	\$119.00	\$106.95	\$94.95
Floodlights	Pair	1,450	SL-3936	\$119.00	\$106.95	\$94.95

LET'S FIND EVERYTHING YOU NEED!

FROM
\$7.95

WH-3045



7.5A DC CABLE

P212

FROM
\$3.20

HP-1221



LOOM TUBE

P218

FROM
\$16.95

TH-1824



WIRE STRIPPERS

P135

FROM
\$7.95

WH-5525



HEATSHRINK

P215

LED DRIVING & FLOODLIGHTS

EXTERNAL LIGHTS & SPOTLIGHTS (CONTINUED)

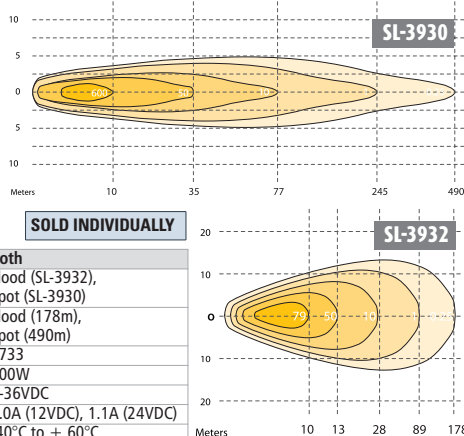
1,733 LUMEN COMPACT SOLID LED SPOT/FLOODLIGHT WITH DEEP OPTIC REFLECTOR

Super tough and compact LED spot/floodlights which can be bolted onto your 4WD, boat, car, off-road buggy or even for security use. Features a die cast aluminium alloy heatsink housing with an unbreakable polycarbonate front cover. Thanks to the deep optic reflector lens, the beam length on these lights is incredible for the lumen output. The spot light model can almost reach half a kilometre! Inside each model is a single next-generation 25W Cree MT-G LED, driven by high end PWM driver circuitry that protects the LED from over temperature and extends the operating life. Includes reverse polarity protection in case you make a junior error when wiring up!

Two versions available - Sold individually:

Spotlight: SL-3930
Floodlight: SL-3932

- IP68 waterproof
- Shock proof
- 50,000 hour life
- Instant ON/OFF



SOLD INDIVIDUALLY



Specifications	Both
Beam pattern	Flood (SL-3932), Spot (SL-3930)
Beam distance	Flood (178m), Spot (490m)
Lumen output	1733
Equivalent halogen lamp	200W
Operating voltage	9-36VDC
Input current:	2.0A (12VDC), 1.1A (24VDC)
Operating temperature	-40°C to + 60°C
Dimensions	86(W) x 100(H) x 93(D)mm

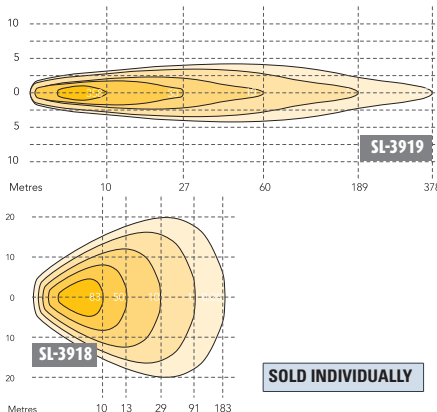
↑ Type		Lumens	Cat.	Qty 1+	Qty 2+	Qty 6+
Spotlight	Each	1,733	SL-3930	\$149.00	\$133.95	\$118.95
Floodlight	Each	1,733	SL-3932	\$149.00	\$133.95	\$118.95

3,486 LUMEN 4.5" IP68 SOLID LED SPOT/FLOODLIGHTS

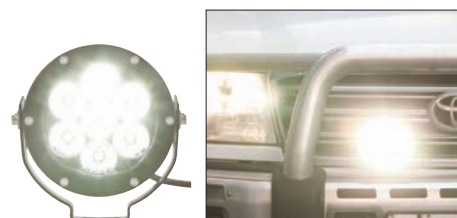
Why would you ever buy halogen or HID spotlights again?

These LED lights output over 3400 lumens of brilliant white light - that's more light than a 300W halogen! They are also completely shockproof, waterproof (IP68), rust proof, shatterproof, last for 50,000 hours, draw a measly 34W, turn on instantly, have a beam throw of up to 378m (for spotlight, flood = 183m), work off 12VDC or 24VDC, and can handle pretty extreme temperatures without fuss. A must have for any serious 4WD bull bar or roll bar, or for any other application where extreme ruggedness and blinding brightness are desired. Available in either spot or flood beam patterns, and fitted with marine grade 316 stainless steel fasteners.

- IP68 waterproof
- Shockproof
- 50,000 hour life
- Equivalent light to a 300W halogen



SOLD INDIVIDUALLY



Specifications	SL-3918 / SL-3919
Beam pattern	Flood (SL-3918), Spot (SL-3919)
Beam distance	Flood 183m, Spot 378m
Lumen output	3486
Equivalent halogen lamp	300W
Input current	2.4A (12VDC), 1.2A (24VDC)
Operating temp	-40°C - 60°C
Dimensions (mounted)	120(Dia.) x 82(D)mm (excluding bracket)

↑ Type		Lumens	Cat.	Qty 1+	Qty 2+	Qty 6+
Floodlight	Each	3,486	SL-3918	\$149.00	\$133.95	\$118.95
Spotlight	Each	3,486	SL-3919	\$149.00	\$133.95	\$118.95

UNIVERSAL BULLBAR MOUNTING BRACKETS

These brackets are designed to mount driving lights, spotlights, UHF antenna's and other various applications to a tube frame (such as a bull-bar). Allows for much easier attachment to bull-bars, trailer railing, ute roll-bars or even a roof rack. Stainless steel construction with shockproof rubber insulation so your tube frame isn't scratched or dented.

Ideal for use with our range of 12VDC LED lights SL-3914, SL-3912, SL-3916, SL-3918, SL-3920 and SL-3922.

3 sizes available to fit various diameter frames:



↑ Diameter		Cat.	Qty 1+	Qty 2+	Qty 6+
25-38mm	Bullbar Mount	SL-3925	\$14.95	\$13.35	\$11.70
40-52mm	Bullbar Mount	SL-3927	\$14.95	\$13.35	\$11.70
70-80mm	Bullbar Mount	SL-3929	\$19.95	\$17.70	\$15.70

SPOTLIGHT COVERS

Keep your LED spotlights covered and protected when not in use or change the light to blue or amber for various driving and weather conducting fog.

Pack includes one each of:

- Clear Blue
- Clear amber
- Solid White



↑ Spotlight Cover	Cat.	Qty 1+	Qty 2+	Qty 6+
To suit SL-3918 & SL-3919	SL-3917	\$29.95	\$26.90	\$23.70
To suit SL-3920, SL-3921 & SL-3922	SL-3923	\$34.95	\$31.45	\$27.90

EXTERNAL LIGHTS & SPOTLIGHTS (CONTINUED)

6,300 LUMEN IP68 6.5" SOLID LED DRIVING/SPOT/FLOODLIGHTS

With a pair of these fitted to the front of your vehicle, you have the equivalent of over 1000W of halogen light (or over 12,000 lumens in the new speak). They are built tough as nails as well - with an IP68 water and dust proof rating, powder-coated diecast aluminium main body, unbreakable polycarbonate lens, marine grade stainless steel fasteners, and high grade electronic circuitry to protect the 7 Cree® XM-L LEDs and drive them at maximum efficiency. You would be hard pressed to find a better LED light at a better price. Each unit supplied with a 2m wire harness with waterproof connector, and 2 bracket options to suit different applications. For off-road use only. Sold individually.

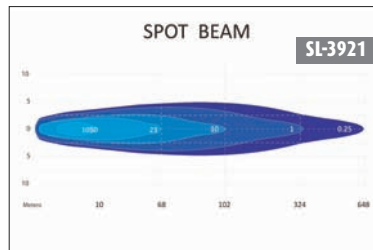
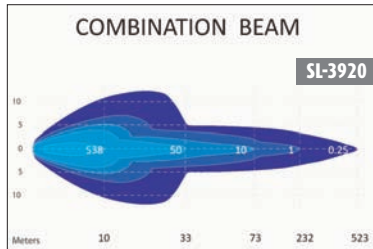
- IP68 waterproof
- Shockproof
- 50,000 hour life
- High quality LED driver electronics
- Equivalent light to 500W halogen

Three versions available:

SL-3920 6,300 Lumen 6.5" Solid LED Driving Light
SL-3921 6,300 Lumen 6.5" Solid LED Spotlight
SL-3922 6,300 Lumen 6.5" Solid LED Floodlight

SOLD INDIVIDUALLY

Specifications	SL-3920/SL-3921/SL-3922
Beam pattern	SL-3920: driving (flood/spot), SL-3921: spot, SL-3922: flood
Beam distance	SL-3920: 523m, SL-3921: 648m, SL-3922: 210m
Lumen output	6,300
LED type	7 x 10W Cree® XM-L
Equivalent halogen lamp	>500W
Input voltage	9-36VDC
Input current	6.6A(12VDC), 2.64A(24VDC)
Operating temp.	-40°C - 60°C
Dimensions	160(Dia.) x 90(D)mm (excluding bracket)



NEW 2015

1 YEAR WARRANTY

AUTO & OUTDOORS

↑ Type		Lumens	Cat.	Qty 1+	Qty 2+	Qty 6+
Driving Light	Each	6,300	SL-3920	\$249.00	\$225.00	\$198.95
Spotlight	Each	NEW 6,300	SL-3921	\$249.00	\$225.00	\$198.95
Floodlight	Each	6,300	SL-3922	\$249.00	\$225.00	\$198.95

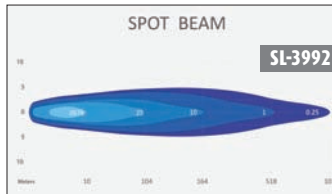
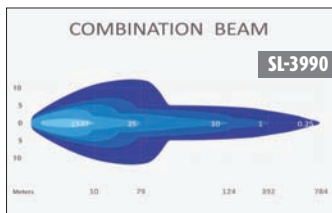
10,140 LUMEN EXTREME 8" LED DRIVING/SPOTLIGHTS

Whether you're a serious 4WD off-roader, long haul truckie, or just want to be king of the "spotlight game", these 8" LED driving lights are ultimate choice for lighting up the road. With each light generating over 10,000 lumens of brilliant, cool white light, you will be illuminating well over 1km of the road ahead with a pair fitted to your rig. The main body is constructed with die cast aluminium alloy (ADC12) to act as a heat sink for the LEDs, with anodized polyester black powdercoat for a tough and durable finish. For final protection the front lens cover is made of unbreakable Lexan polycarbonate to defend against the odd rock, tree branch or roof. Of course, being LED you get all the other benefits such as complete shock and vibration resistance (a must on bumpy outback roads), 50,000 hour life expectancy and instant ON/OFF operation. And of course, the whole unit is completely dust and waterproof to IP68 with a Gore-Tex® breather to avoid internal condensation. Sold individually.

- IP68 waterproof
- Shockproof
- 50,000 hour life
- High quality LED electronics
- Thermal management circuitry

SOLD INDIVIDUALLY

Specifications	Both
Beam pattern	SL-3990 driving (spot/flood), SL-3992 spot
Beam distance	SL-3990 980m, SL-3992 1150m
Lumen output	10,140
LED type	13 x 10W Cree® XM-L
Equivalent Halogen	> 750W
Input voltage	9-36VDC
Operating temp	-40°C - 60°C
Dimensions	200(dia.)mm



NEW 2015

1 YEAR WARRANTY

↑ Type		Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
Driving Light	Each	10,140	SL-3990	\$469.00	\$425.00	\$379.00
Spotlight	Each	10,140	SL-3992	\$469.00	\$425.00	\$379.00

TECH TALK!

HOW TO WIRE UP 4WD SPOT-LIGHTS/DRIVING LIGHTS

Fitting spotlights or driving lights to your 4WD, ute or other vehicle is generally pretty simple when you use a relay wiring kit like our SY-4079, but it pays to wire it correctly to avoid any hassles with the law.

Most states follow the requirements of the Australian Design Rules (ADRs), which requires that they be wired so that they only operate in conjunction with the head light circuit and are fitted with an independent ON/OFF switch – however some states require them to only operate in conjunction with the HIGH beam circuit and with an independent switch. Check with your local transport authorities for rules in your area.

LED DRIVING & FLOODLIGHTS

EXTERNAL LIGHTS & SPOTLIGHTS (CONTINUED)

8,400 & 16,800 LUMEN IP68 DUAL ROW SOLID LED LIGHT BARS

More and more serious 4WD enthusiasts are opting for an LED light bar instead of the traditional "spotties" for auxiliary lighting. In most cases, an LED light bar will give more light output than a pair (or even 2 pairs) of halogen or HID spotties, and are far less obtrusive on the front of the vehicle. These dual row LED light bars feature high quality Osram LEDs with extremely optically efficient lenses, to ensure the maximum light is collected from the LEDs and driven forward for maximum beam distance. Built with powder coated aircraft grade 6063 extruded aluminium, with unbreakable Lexan polycarbonate front lens and Gore-Tex breather to achieve the IP68 waterproof rating - they are very tough. Fitted with combination spot & flood "driving" beam, and features 316 grade stainless hardware. Available in 20" (SL-3982) and 40" (SL-3984) sizes.

- IP68 waterproof
- Shockproof
- 50,000 hour life
- High quality PWM thermal management electronics

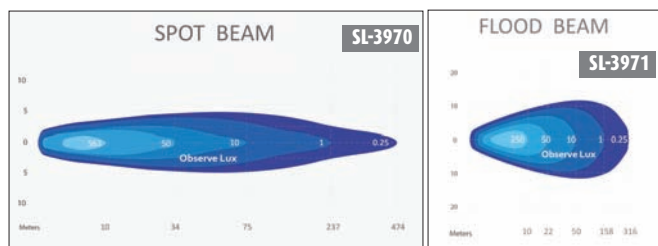
Specifications	SL-3982	SL-3984
Beam pattern	Combination flood & spot	Combination flood & spot
Beam distance	755m	1163m
Lumen output	8,400	16,800
LED type	40x Osram	80x Osram
Equivalent halogen lamp	>600W	>1200W
Input voltage	9-36VDC	9-36VDC
Input current	6.8A(12VDC), 3.95A(24VDC)	14.9A(12VDC), 6A(24VDC)
Operating temp	-40°C - 60°C	-40°C - 60°C
Dimensions	550(W) x 82(H) x 89(D)mm, without brackets	1060(W) x 82(H) x 89(D)mm, without brackets

↑ Type		Lumen	Cat.	Qty 1+	Qty 5+	Qty 10+
Combo Flood & Spot	Each	8,400	SL-3982	\$599.00	\$539.00	\$479.00
Combo Flood & Spot	Each	16,800	SL-3984	\$999.00	\$899.00	\$799.00

5,400 LUMEN IP68 12" SINGLE ROW SOLID LED LIGHT BARS

This fantastic high power single row LED light bar uses six 10W Cree® XM-L LEDs to produce a whopping 5,400 lumens - equivalent to a 400W halogen. With an overall length of 12" (310mm), they are a very compact solution for lighting up the road without dominating the front of your 4WD. If you need more light, or want to combine a spot and a flood beam, then you can use the supplied brackets & joiners to either mount them in line (side by side) or stacked on top of each other. Built from powder coated die-cast aircraft grade aluminium with a Lexan polycarbonate front cover and Gore-Tex breather, they are not only shock and vibration resistant but IP68 waterproof as well. Available in spot (SL-3970) or flood (SL-3971) beam, and fitted with 316 grade stainless hardware.

- IP68 waterproof
- Shockproof
- 50,000 hour life
- High quality PWM thermal management electronics
- Equivalent to 400W halogen



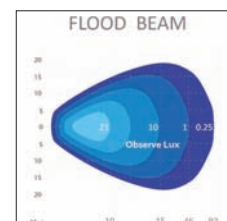
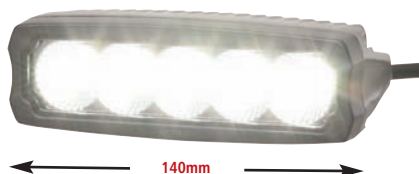
↑ Type		Lumen	Cat.	Qty 1+	Qty 5+	Qty 10+
Spotlight	Each	5,400	SL-3970	\$249.00	\$225.00	\$198.95
Floodlight	Each	5,400	SL-3971	\$249.00	\$225.00	\$198.95

2,250 LUMEN 25W SINGLE ROW LED VEHICLE WORKLIGHT

Just hook it up to your 12V or 24V battery system and light up your work area, campsite, boat deck or any other outdoor area. This single row LED work light features 5 x high power Epistar 5W LEDs housed in an IP67 rated powder coated aluminium heatsink case, covered with an unbreakable Lexan polycarbonate lens. Being LEDs, they use very little power to produce ample light, and are impervious to shock and vibrations - excellent in 4WD, marine, caravan, mining, or any other harsh environment application.

- Flood beam output.

Specifications	SL-3975
Beam patter	Flood
Beam distance	92m
Lumen output	2,250
Equivalent halogen	175W
Input current	1.56A (12VDC), 0.80A (24VDC)
Operating temp	-40°C - 60°C
Dimensions	140(L) x 45(H) x 71(D)mm



↑ Type		Lumen	Cat.	Qty 1+	Qty 5+	Qty 10+
Flood		2,250	SL-3975	\$79.95	\$71.95	\$63.95

NEW
2015

1
YEAR WARRANTY

NEW
2015

1
YEAR WARRANTY

NEW
2015

1
YEAR WARRANTY

CAR LIGHTING - HEADLIGHT

12V LED SPOT/RUNNING LAMPS

Waterproof, long life and easily installed. These super bright running lamps use 9 x LEDs to produce enough light to run during the day time or used as a spot/flood light fixture. The two piece set produces 120 lumens output improving road safety and visibility of vehicles on and off the road.

- 9 x 2 White LEDs
- Energy efficient 12V
- Brightness: 216 Lumens
- Dimensions: 85(Dia)mm



SOLD AS A PAIR



↑	Lumens	Cat.	Qty 1+	Qty 4+	Qty 10+
Pair	216	SL-3445	\$39.95	\$35.90	\$31.90

DISCRETE 10 LED DAYTIME RUNNING LAMP KIT

Attractive and subtle daytime running lights to add a touch of class to your car or truck, and make your car more visible on the road during the day for safety. Designed to be installed flush with your vehicles body, they will connect to the control module which intelligently switches the lights on when the engine is started. The ten discrete LEDs gives you the flexibility to install them as desired. Supplied with an appropriate size hole saw for fast and easy installation.



Specifications	
Operating voltage	12-24VDC
LED lifetime	> 50,000 hours
Dust and Waterproof	Yes
LED Colour Temperature	5500-6500K
Lumens	70 Lumens
Cutout hole required	19.5mm
Dimensions:	23(Dia.) x 24(L)mm



↑	Lumens	Cat.	Qty 1+	Qty 4+	Qty 10+
	70	SL-3457	\$99.95	\$89.95	\$79.95

CAR LIGHTING - EXTERIOR

Warning: State roads & traffic authorities prohibit the retrofitting of these products to cars with normal headlights. To be used only for off-road and showroom vehicles when replacing quartz halogen bulbs, or as headlight replacements for HID factory-fitted new model vehicles

SLIM BALLAST XENON HID LIGHT KITS

HID provides far greater light output than standard automotive lights. At night, road signs, pedestrians, and general road hazards will receive much better illumination so you can drive with more confidence. This series of kits all feature a slim ballast design for ease of installation in engine bays and tight spaces.

- Ballast dimensions: 85(L) x 61(W) x 15(H)mm
- Lifespan: >2500 hours
- 300% more light than halogen
- HID 92 Lumens per watt compared to 18 Lumens per watt for a halogen



Only with SL-3495

H1 Slim Ballast HID Kit 12V 6000K	SL-3490
H3 Slim Ballast HID Kit 12V 6000K	SL-3492
H4 Slim Ballast HID Kit 12V 6000K	SL-3494
H4 Slim Ballast HID High/Low Kit 12V 6000K	SL-3495
H7 Slim Ballast HID Kit 12V 6000K	SL-3496

Note: Please ensure your lights are angled correctly
These lights are not ADR approved



↑	Voltage	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	12V	H1	SL-3490	\$59.95	\$53.95	\$47.90
	12V	H3	SL-3492	\$64.95	\$58.50	\$51.95
	12V	H4	SL-3494	\$64.95	\$58.50	\$51.95
	12V	H4 High + Low	SL-3495	\$79.95	\$71.95	\$63.95
	12V	H7	SL-3496	\$59.95	\$53.95	\$47.90

HID SINGLE BEAM BULBS - 35W

Drop-in replacements HID bulbs. H3, H4 and H7 types available.

Specifications	
Power	35W
Lumination	2500 - 3,500 lumens
Lifespan	3000 hours
Colour temperature	3000 - 6000K
Voltage	70 - 100V



SL-3412

SL-3413

↑	Voltage	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	12V	H3	SL-3411	\$14.95	\$13.35	\$11.70
	12V	H4	SL-3412	\$14.95	\$13.35	\$11.70
	12V	H7	SL-3413	\$14.95	\$13.35	\$11.70

REPLACEMENT BULBS + BALLAST

Used in the latest model luxury and high performance cars, High Intensity Discharge (HID) vehicle headlights are far brighter, whiter and more efficient than their quartz halogen predecessors. These HID dual lamp conversion kits are suitable for H4 bases and incorporate the latest in German engineering.

- 35W HID Xenon lamps
- 6000K colour temperature comparable to sunlight
- Extra bright 3200 lumens



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Replacement High/Low HID Bulb	SL-3414	\$24.95	\$22.35	\$19.70
Replacement Ballast for HID Kits	SL-3418	\$24.95	\$22.35	\$19.70

HEADLAMP KITS WITH CREE® LEDs

Bright vehicle headlamps with advanced Cree® LEDs. Each kit comes in an alloy bodied case and connects via the supplied ballasts. Each kit contains 2 x LED modules, 2 x controller assemblies, and all the wiring is pre-terminated to appropriate connectors to make installation as quick and easy as possible. Each kit has a very high light output, 2,500 lumens for 30W (H7) and 3,000 lumens for 40W (H4) of power light output. These modules will last up to 10,000 hours and are very efficient.

- Accurate LED position to ensure correct beam pattern
- More spot without glare
- Plug and play
- High intensity Cree® LEDs



Specifications	SL-3520	SL-3522	SL-3524
LED type	4 x Cree® XML U2	2 x Cree® MKR	2 x Cree® MKR
Colour temperature	5,500K	5,500K	5,500K
Lumens	3,000	2,500	3,000
Operation mode	Low	Low	High and Low
Power	40W	30W	40W
Input voltage	8VDC - 48VDC	8VDC - 48VDC	8VDC - 48VDC
Lifetime	10,000 hours	10,000 hours	10,000 hours
Dimensions	84(L) x 42(W)mm	84(L) x 42(W)mm	84(L) x 42(W)mm

↑	Voltage	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	12/24V	H4 Low	SL-3520	\$149.00	\$133.95	\$118.95
	12/24V	H7 Low	SL-3522	\$149.00	\$133.95	\$118.95
	12/24V	H4 High + Low	SL-3524	\$169.00	\$151.95	\$134.95

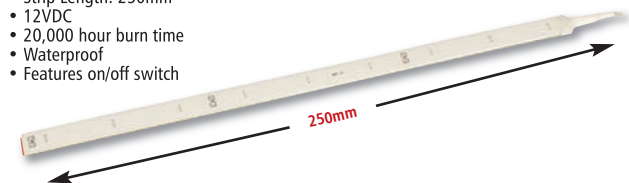
AUTO EXTERIOR ILLUMINATION

CAR LIGHTING - INTERNAL & EXTERNAL

12VDC 9 X LED FLEXIBLE STRIP LIGHT KIT - BLUE

Give your car the visual edge it deserves with this easy to install LED light strip. It's a flexible 250mm long strip with 9 x bright LEDs. Adhesive backing makes installation easy. Ideal for lighting under your car, in your engine bay, just above your accelerator pedal, and in corners/dark areas of your interior. A mountable on/off switch terminal is included for easier control.

- Strip Length: 250mm
- 12VDC
- 20,000 hour burn time
- Waterproof
- Features on/off switch



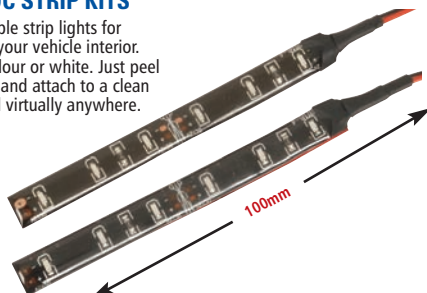
↑ Colour	Cat.	Qty 1+	Qty 2+	Qty 4+
Blue	SL-3957	\$9.95	\$8.75	\$7.75

2 X 6 LED LIGHT 12VDC STRIP KITS

Pack of 2 x 6 bright LED flexible strip lights for adding extra illumination to your vehicle interior. Choose from a sharp blue colour or white. Just peel off the protective 3M® cover and attach to a clean dry surface. Can be mounted virtually anywhere.

Two colours available:

- 100(L) x 11(H)mm



↑ Colour	Cat.	Qty 1+	Qty 2+	Qty 4+
White	SL-3951	\$14.95	\$13.35	\$11.70
Blue	SL-3953	\$14.95	\$13.35	\$11.70

EXTERIOR AUTOMOTIVE PEARL LED KIT



Easy to install pearl styled LED lights designed to add some luminescence to your vehicle. Adhesive backing plates allow you to stick them to any clean flat surface of your car.

- Pack of 8
- 12VDC
- Each LED is 25(Dia) x 18(H)mm

↑ Colour	Cat.	Qty 1+	Qty 2+	Qty 4+
White	SL-3959	\$9.95	\$8.75	\$7.75

12" FLEXIBLE 21 LED LIGHT TUBE

Many of you have probably seen LED lights styled similar to neons available from a few places, but not like this! Typically they are a line of LEDs mounted to a PCB at about 25mm intervals, mounted inside a clear acrylic tube. Our models have a major advantage over those units.



Ours are FLEXIBLE! They can mount straight, but will easily bend end-to-end, giving you a myriad of mounting options. You can't kink it like you would say, a garden hose, as the PCB inside will break if you push it too far, but they still provide excellent versatility. They are a great low current light source, drawing around 200mA.

- The tube is 24" (610mm) long, and houses 21 super bright LEDs.
- The white unit is great for general low-current lighting in a caravan, 4WD etc.

↑ Colour	Cat.	Qty 1+	Qty 2+	Qty 4+
White	SL-3950	\$24.95	\$22.35	\$19.70

CAR LIGHTING - INTERIOR

T5 & T10 REPLACEMENT LED GLOBES - 12VDC

Replace or jazz up your automotive dashboard or indicator lighting with LEDs! Not only will they spruce up the look of your car, they are also long life with low current consumption and total reliability.



- T5 & T10 sizes to suit most applications

↑				Cat.	Qty 1+	Qty 2+	Qty 4+
T5	Wedge	LED Globe	White	ZD-0380	\$1.95	\$1.75	\$1.40
T5	Wedge	LED Globe	Red	ZD-0381	\$1.95	\$1.75	\$1.40
T5	Wedge	LED Globe	Blue	ZD-0382	\$1.95	\$1.75	\$1.40
T5	B8.5D	LED Globe	White	ZD-0384	\$2.50	\$2.21	\$1.80
T5	B8.5D	LED Globe	Red	ZD-0385	\$2.50	\$2.21	\$1.80
T5	B8.5D	LED Globe	Blue	ZD-0386	\$2.50	\$2.21	\$1.80
T10	Wedge	LED Globe	White	ZD-0390	\$1.95	\$1.75	\$1.40
T10	Wedge	LED Globe	Red	ZD-0391	\$1.95	\$1.75	\$1.40
T10	Wedge	LED Globe	Blue	ZD-0392	\$1.95	\$1.75	\$1.40
T10	Wedge	LED Globe	Quad White	ZD-0394	\$3.50	\$3.15	\$2.85
T10	Wedge	LED Globe	Quad Red	ZD-0395	\$3.50	\$3.15	\$2.85
T10	Wedge	LED Globe	Quad Blue	ZD-0396	\$3.50	\$3.15	\$2.85

LED REPLACEMENT GLOBES WITH 6 X 5730SMD LEDs

This range of common automotive and general use LED globes are also compatible with modern CANbus systems, so that they don't give globe failure warnings when you fit them to your modern vehicle. Each globe is powered by 12VDC, is fitted with six high brightness 5730SMD type LEDs, and have a non-polarity circuit so you don't have to worry about fitting them the right way around. There are three models to choose from:



Cat no.	Base	Lumens	LED Type	Beam	Colour	Dimensions
ZD-0730	T10 wedge	150	6x5730SMD	360°	White	28(H) x 12(Dia)mm
ZD-0732	E10 screw	150	6x5730SMD	360°	White	28(H) x 12(Dia)mm
ZD-0734	BA9S bayonet	150	6x5730SMD	360°	White	28(H) x 12(Dia)mm

↑ Type	Cat.	Qty 1+	Qty 4+	Qty 10+
T10 Wedge	ZD-0730	\$14.95	\$13.45	\$11.95
E10 Screw	ZD-0732	\$14.95	\$13.45	\$11.95
BA9S Bayonet	ZD-0734	\$14.95	\$13.45	\$11.95

T20 CREE® LED GLASS GLOBE

- Life: Greater than 50,000 hours
- Colour: White

Specifications	
Type	12VDC Brake Light
Base	T20
Lumens	200
LED Module	3 x Cree® XP-E
View	120°
Dimensions	46(H) x 21(Dia)mm



↑ Base	Cat.	Qty 1+	Qty 4+	Qty 10+
T20 Brake Light	ZD-0499	\$24.95	\$22.35	\$19.70

REVERSING LED LIGHT GLOBE WITH BEEPER

Replacement LED reversing light with built-in warning buzzer to warn pedestrians that you are reversing. Great for large caravans, trucks and buses. Suits vehicles with P21W BA15S reverse light bulbs.

- 9 Super Bright White LEDs

Specifications	
Brightness	> 6000 lux
Input voltage	12VDC
Current	< 400mA
Max SPL	115dB



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	ZD-0519	\$9.95	\$8.75	\$7.75

BAY15 & BA9 CREE® LED GLASS GLOBE

- Life: Greater than 50,000 hours

Specs	ZD-0513	ZD-0515
Type	12VDC	12VDC
Base	BA15D	BA15D
LED Module	1 x Cree® XP-E	3 x Cree® XP-E
View	120°	120°
Dimensions	39(H) x 18.5(Dia)mm	46(H) x 21(Dia)mm



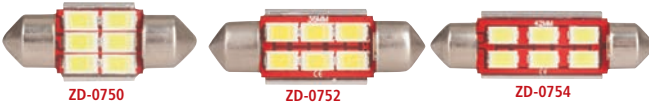
ZD-0513

↑ Base	Colour	Lumens	Cat.	Qty 1+	Qty 4+	Qty 10+
BA15D	White	100	ZD-0513	\$14.95	\$13.35	\$11.70
BA15D	White	200	ZD-0515	\$24.95	\$22.35	\$19.70

CANBUS COMPATIBLE GLOBES

LED FESTOON REPLACEMENT GLOBES, CANBUS COMPATIBLE

A range of ultra-bright LED replacement "festoon" globes for car interior lights, which are fully compatible with modern "CANBus" systems that would otherwise give a globe failure warning when using an LED globe. Each globe features six ultra bright wide angle SMD LEDs, a non-polarity circuit (can fit the globe either way), and a CANBus circuit. There are three models to choose from, each working on 12VDC.



Cat no.	Size	Lumens	LED Type	Beam	Colour
ZD-0750	31mm	150	6x5730SMD	120°	White
ZD-0752	36mm	150	6x5730SMD	120°	White
ZD-0754	41mm	150	6x5730SMD	120°	White



↑	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
	31mm	ZD-0750	\$12.95	\$11.35	\$10.35
	36mm	ZD-0752	\$12.95	\$11.35	\$10.35
	41mm	ZD-0754	\$12.95	\$11.35	\$10.35

CANBUS COMPATIBLE AUTOMOTIVE BA15 TYPE LED REPLACEMENT GLOBES

More and more modern vehicles are employing an electronic control system called CANBus, which has many benefits including monitoring of globe failures. This can pose a bit of a problem with LED replacement globes causing the CANBus to detect that globe as having failed. This range of BA15 type LED globes are all CANBus compatible (won't give errors), with universal polarity, very low power consumption and a high lumen output.

- Powered by 12VDC, can be used as tail/brake light (BAY15D), parker light (BA15S), or even as interior light globes (BA15D/BA15S) thanks to their high brightness.
- The BA15D is very commonly used in caravan and marine interior lights. For off-road use only.



Three types available:

Cat no.	Base	Lumens	LED Type	Beam	Colour	Dimensions
ZD-0740	BAY15D	525	21x 5730SMD	360°	White	50(H) x 18(Dia)mm
ZD-0742	BA15D	525	21x 5730SMD	360°	White	50(H) x 18(Dia)mm
ZD-0744	BA15S	525	21x 5730SMD	360°	White	50(H) x 18(Dia)mm

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +	
	Stop/Tail Lamp CANBus	ZD-0740	\$19.95	\$17.95	\$15.70
	Interior/Navigation Lamp CANBus	ZD-0742	\$19.95	\$17.95	\$15.70
	Interior/Park/Reverse Lamp CANBus	ZD-0744	\$19.95	\$17.95	\$15.70

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here!
Check our website for over
3,500 pages of data!



360° "3D" BA15 TYPE LED AUTOMOTIVE REPLACEMENT GLOBES, CANBUS COMPATIBLE

Many cars are now employing an electronic control system called CANBus, which can be a problem when using LED replacement globes as the system will give a globe failure indication. Being CANBus compatible, these LED globes don't cause these failure indications. Each globe features a special "3D" type of LED lamp, which provides an extremely even, wide light output that is very similar to a normal globe in style and appearance. This makes them a perfect replacement for interior lights, and automotive lamps where the light fitting has a lot of "clear" elements making other LED globes unattractive to look at. Powered by 12VDC, and suitable for off-road use only.



Three models available:

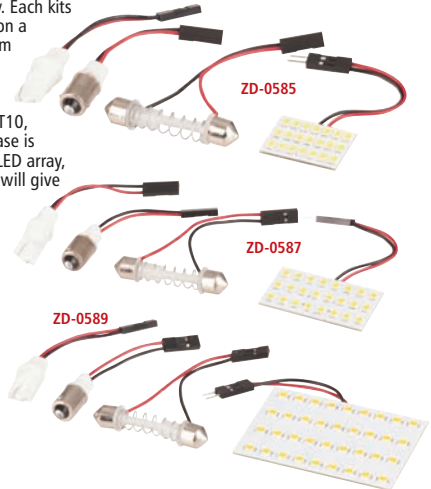
Cat no.	Base	Lumens	LED Type	Beam	Colour	Dimensions
ZD-0746	BAY15D	300	"3D" LED	360°	White	47(H) x 19(Dia)mm
ZD-0748	BA15D	300	"3D" LED	360°	White	47(H) x 19(Dia)mm
ZD-0749	BA15S	300	"3D" LED	360°	White	47(H) x 19(Dia)mm

⬆	Cat.	Qty 1 +	Qty 4 +	Qty 10 +	
	Stop/Tail	ZD-0746	\$29.95	\$26.90	\$23.70
	Interior/Navigation	ZD-0748	\$29.95	\$26.90	\$23.70
	Interior/Park/Reverse	ZD-0749	\$29.95	\$26.90	\$23.70

CAR LIGHTING KITS

UNIVERSAL T10/211/BA9S LED RETROFIT KITS

Fantastic little kits to upgrade your car/caravan/boats interior lighting with LED technology. Each kit consists of an array of LEDs on a board with 3M adhesive foam backing, making it easy to retrofit into almost any existing light. There are 3 bases which can connect to T10, 211, or BA9S sockets. The base is then connected to the SMD LED array, couldn't be easier! The LEDs will give greater lifespan and brighter light in many cases.



Three kits available.

21 X SMD LEDs - ZD-0585

24 X SMD LEDs - ZD-0587

36 X SMD LEDs - ZD-0589

Specifications	ZD-0585	ZD-0587	ZD-0589
Power	2.5W, 12VDC	3W, 12VDC	4.5W, 12VDC
Lumens	260	310	450
LED type	2835 SMD	2835 SMD	2835 SMD
LED count	21	24	36
LED colour	Cool white	Cool white	Cool white
Dimensions	25(L) x 20(W)mm	45(L) x 25(W)mm	60(L) x 40(W)mm



↑	Lumens	Power	Cat.	Qty 1+	Qty 2+	Qty 4+
	260	2.5W	ZD-0585	\$9.95	\$8.75	\$7.75
	310	3W	ZD-0587	\$12.95	\$11.35	\$10.35
	450	4.5W	ZD-0589	\$14.95	\$13.45	\$11.95

TECH TALK!

AUTOMOTIVE GLOBES

You may look at our range of LED automotive globes and wonder what all these different globe numbers mean: BA15S, T10, E10, BAY15D, etc. Well luckily these numbers are an industry standard, and actually describe the type and size of the globe's base and pin arrangements.

Below is a list of the most common types of automotive globes, and a typical application for them:

T5	5mm wedge style base. Used in dashboard illumination
T10	10mm wedge style base. Used in dashboards, park light, number plate illumination, etc
T20	20mm wedge style base. Used in some indicators, tail and brake lights
E10	10mm Edison screw base. Used in some dashboards, park lights and number plate illumination (typically on older vehicles)
BA9S	9mm Bayonet cap base with single contact pin. Used in dashboards, park lights and various lights
BA15S	15mm Bayonet cap with single contact pin. Used in indicators, tail, parker and some brake lights
BA15D	15mm Bayonet cap with two contact pins. Used in caravan interior lights and marine navigation lights
BAY15D	15mm Bayonet cap with offset side location tabs, with two contact pins on the base. Used for tail/stop lights (high/low brightness)

TRAILER LIGHTING, PLUGS & CABLE

CAR LIGHTING - TRAILER LIGHTS

12V LED TRAILER LIGHT KIT WITH WIRING

Regular bulb failures in your trailer lights are not only annoying to replace, but also quite dangerous to your fellow road users. Switching to LED alternatives solves this problem completely, since LEDs are not at all affected by shock and vibration, last over 50,000 hours, use a fraction of the power, and are actually more visible to other road users. These trailer lights are an "all-in-one" solution measuring only 100mm wide by 90mm high, and providing all the legal illumination needs of a caravan, boat trailer, camping trailer etc., being; Stop, Tail, Turn and number plate illumination, along with a red reflector panel. The housing is submersible which is perfect for boat trailers, and each light is fitted with a connector to make wiring easier. The complete kit includes 2x trailer lights, with a pre-made 7m trailer cable with 7pin flat trailer connector. Sold as a pair.

- ADR Approved
- Screw stud mount.
- 7m pre-made trailer cable included
- Dimensions: 100(W) x 90(H)mm (each)



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	ZD-0722	\$69.95	\$62.95	\$55.95

12V 1.5M LED BRAKE LIGHT STRIPS

Compared to normal incandescent bulbs LEDs are brighter, which makes them easier to see from a distance and light up quicker. This design features a 2 piece durable construction and waterproof for exterior mounting. Install in minutes using 4 pin SAE plug.

- 90 x Red LEDs
- Dimensions: 1524(L) x 22(W) x 5(H)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	SL-3962	\$54.95	\$49.45	\$43.90

12V LED TRAILER LIGHTS (STOP/TURN/TAIL)

Regular bulb failures in your trailer lights are not only a pain in the posterior, but also quite dangerous to your fellow road users. Switching to LED alternatives solves this problem completely, since LEDs are not at all affected by shock and vibration, last over 50,000 hours, use a fraction of the power, and are actually more visible to other road users. These trailer lights are an "all-in-one" solution measuring only 100mm wide by 90mm high, and providing all the legal illumination needs of a caravan, boat trailer, camping trailer etc., being; Stop, Tail, Turn and number plate illumination. They appear to be quite water resistant but we cannot quote an IP rating for water and dust. Also has a red reflector panel.



- Screw stud mount.
- Dimensions: 100(W) x 90(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Pair	ZD-0720	\$39.95	\$35.90	\$31.90

TRAILER WIRING ACCESSORIES

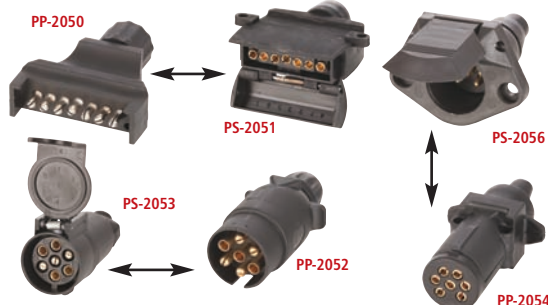
Before 1988, the only trailer connector in common use was a 6 pin unit (There were some 5 pin plug/sockets found in Victoria, TAS, SA & NT). Since 1988 you must have a 7 pin (minimum) connector in order to register your boat, camper trailer etc. (You may need a bigger connector in some cases, so consult an auto electrician for this) in both Australia & New Zealand.

You can, however, in the case of small box trailers use 5 core wire. See below.

RE-WIREABLE TRAILER CONNECTORS

A range of the most common 7pin trailer plugs and sockets, featuring easy to use screw down terminals, corrosion resistant metal contacts and high quality UV stabilised plastics. In each type, the socket is fitted to the vehicle, and the plug is fitted to the trailer.

- All trailer plugs and adaptors are made from the highest quality material.



TECH TALK!

There are now three types of trailer connectors - each with its own wiring configuration.

See our website for full details of pin connectors and colours...

TRAILER PLUG ADAPTOR LEADS

Often we find that the trailer we've borrowed from a mate does not plug into the socket on your vehicle, and that's where these trailer plug adaptor leads come in handy. About 300mm in length, and 6 versions available to fix up any mismatch of the 7 Pin Flat, 7 Pin Large round and 7 Pin Small round trailer connectors. Remember, match the plug end of the adaptor to the socket on your car, and the socket end of these adaptors to the plug end on your trailer.

- All trailer plugs and adaptors are made from the highest quality material.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+	
	7 Pin Flat Plug	PP-2050	\$7.95	\$6.95	\$6.25
	7 Pin Flat Socket	PS-2051	\$7.95	\$6.95	\$6.25
	7 Pin Large Round Plug	PP-2052	\$7.95	\$6.95	\$6.25
	7 Pin Large Round Socket	PS-2053	\$7.95	\$6.95	\$6.25
	7 Pin Small Round Plug	PP-2054	\$7.95	\$6.95	\$6.25
	7 Pin Small Round Socket	PS-2056	\$7.95	\$6.95	\$6.25

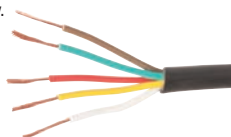
↑		Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	7 Pin Flat Plug to 7 Pin Large Round Socket	PA-2061	\$15.95	\$14.35	\$12.70
	7 Pin Flat Plug to 7 Pin Small Round Socket	PA-2062	\$15.95	\$14.35	\$12.70
	7 Pin Small Round Plug to 7 Pin Flat Socket	PA-2063	\$15.95	\$14.35	\$12.70
	7 Pin Large Round Plug to 7 Pin Flat Socket	PA-2064	\$15.95	\$14.35	\$12.70
	7 Pin Small Round Plug to 7 Pin Large Round Skt	PA-2065	\$15.95	\$14.35	\$12.70
	7 Pin Large Round Plug to 7 Pin Small Round Skt	PA-2066	\$15.95	\$14.35	\$12.70

5 CORE BOX TRAILER CABLE - 10M

A 10 metre length of the standard 5 conductors sheathed in a tough black PVC jacket.

Conductor colours are listed below. Makes wiring easy.

- Yellow (Left indicator)
- White (Earth)
- Green (Right indicator)
- Red (Stop light)
- Brown (Tail light, no. plate & clearance)

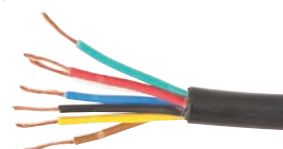


↑	Cat.	Qty 1+	Qty 4+	Qty 10+
5 Core	WH-3091	\$29.95	\$26.95	\$23.95

7 CORE TRAILER WIRING LOOM - 10M

A 10 metre length of the standard 7 conductors sheathed in a tough black PVC jacket. Conductor colours are listed below. Makes wiring easy. 10m accommodates even up to quite large boat trailers.

- Yellow (Left indicator)
- Black (Aux/reversing)
- White (Earth)
- Green (Right indicator)
- Blue (Electric brakes)
- Red (Stop light)
- Brown (Tail light, no. plate & clearance)



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
7 Core	WH-3090	\$39.95	\$35.95	\$31.95

BOAT ANTIFOULING SYSTEM

This product is based on the collaborative design between us and "Silicon Chip" magazine. (See the September 2010 issue of this magazine for a complete preamble and technical description of electronic/ultrasonic antifouling technology.)

The product was originally only available in DIY kit form which limited availability to experienced home constructors. Even so the kit has been very popular. The scope of the original design has been expanded to include larger vessels. We also have completely manufactured the transducers & all electronics. It is now just a straight forward installation of a built and warranted product.

GENERAL

There seems to be a growing consensus that ultrasonic antifouling systems appear to work very well. With such a system you should be able to avoid the yearly task of slipping the boat and repainting the hull with what has to be a pretty nasty chemical goo called antifouling paint. We estimate that ultrasonic antifouling should reduce this task up to 90%. You will still probably need to slip your boat occasionally to monitor corrosion, replace sacrificial anodes, etc.

WHAT YOU GET WITH THIS PRODUCT

The two and four channel units are almost identical. You get a control box which contains the electronics. You get a wiring loom which includes plenty of cable to locate the transducers. You will also get a comprehensive installation & instruction manual. You will need to do your own wiring for the +12VDC power source. This means you will need to provide a switch, live fuse & 10A rated marine grade wire.

TECHNICAL DESCRIPTION

The central component is a main PCB which consists of a specially programmed micro processor which generates the special frequencies which seriously deter growth of the various organisms that choose to use your boat as a home. The microprocessor and associated circuit has a special low battery detect feature. If the battery powering this unit falls below a threshold voltage the unit turns itself off. This prevents the battery becoming totally flat. Flat batteries quickly sulphate up and are generally a write-off after that. It is therefore important to have a regular battery charge on your boat. (The best of course is permanent connection to shore power or solar or wind turbine alternator boost.) The central circuit drives up to four ultrasonic transducers which are firmly attached to the hull. Generally two transducers will do for a boat up to 12m and four for a boat up to say 22m.

The photographs shown below are from a customer's 22ft boat using the kit version of the antifouling system shown above (except he was only using "ONE" transducer). In the customer's post on a popular yachting blog, he explains that the photos were taken eleven months after the hull was cleaned of hard and heavy growth, and twenty one months after the boat's last antifouling. There was no hard growth, and the soft growth that is visible in the photographs could be easily removed with a soft nailbrush! Overall the customer was extremely happy with the result and believes the system has already paid for itself. If you want to read the article for yourself visit <http://bit.ly/ybhreview>

Photos courtesy of Dr Parmegiani



"The result was so good, I nearly cried." These photos show the hard growth (or lack of) nearly 2 years after the boats last antifouling.

Two Antifouling models available:

DUAL VERSION

Suits boats up to 12 metres

YS-5600

QUAD VERSION

Suits boats up to 22 metres

YS-5602

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Dual Version	YS-5600	\$999.00	\$899.00	\$799.00
Quad Version	YS-5602	\$1,329.00	\$1,199.00	\$1,065.00

Full installation, intro video & user manuals available on website.

MARINE TORCH

FLOATING LED TORCH

A sturdy quality torch for your next camping trip or fishing adventure. Equipped with 3 ultra bright Osram Osolon LEDs, matched with a special reflector to produce a focused beam capable of lighting up long distances. The base features a fold-out hook for attaching to your bag or hanging in your tent. Both the base and lens end are o-ring sealed allowing the torch to float in water.

- Osram Osolon LEDs
- Requires 2 x D batteries
- Dimensions: 215(L) x 71(Dia.)mm



IT FLOATS!

	Cat.	Qty 1+	Qty 5+	Qty 10+
Floating Torch	ST-3487	\$29.95	\$26.90	\$23.70

MARINE DISTRESS LIGHTS

SURVIVOR DISTRESS LED LIGHT

A handy safety device that is a must when you are venturing out in open water. Unit is small, lightweight with a lanyard and clip for easy attachment to any life jacket or clothing. The bright LED distress light activates automatically when submerged in water.

- Water activated
- Lanyard and clip easy to be attached in any of life vest
- Waterproof construction
- Battery replaceable - battery Life: up to 100 hours



	Cat.	Qty 1+	Qty 5+	Qty 10+
Distress LED Light	ST-3230	\$6.95	\$6.25	\$5.50

FLOATING LED STROBE LIGHT FLARE

An essential safety device for boating enthusiasts or those who place themselves in situations of vast isolation. This LED flare is waterproof and will float vertically so the lens end sits above water. It also features a strong magnetic base so will sit securely on body of a car in the event of an emergency.

- Burn time: 72 hours
- Requires 2 x AAA batteries
- Dimensions: 158(H) x 36(Dia.)mm



	Cat.	Qty 1+	Qty 5+	Qty 10+
LED Strobe	ST-3231	\$19.95	\$17.70	\$15.70

4 LED MARINE STROBE LIGHT

Ideal for marine use to ensure your vessel stays visible at night or in poor light. Features a light sensor under the lens so it stays on at night and auto-switches off during the day. The base end has a standard marine mounting thread for attaching to a buoy or boating device. Also great for night road work, camping, hiking, mountain climbing etc.

- Requires 2 x D batteries
- Burn time: 360 hours
- Dimensions: 230(H) x 52(Dia.)mm



NEW LOW PRICE

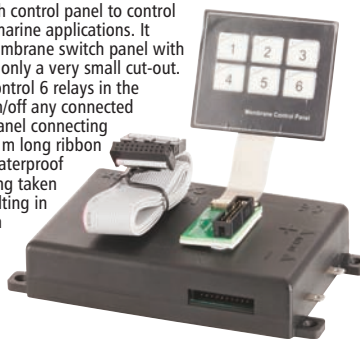
	Cat.	Qty 1+	Qty 5+	Qty 10+
LED Strobe	ST-3232	\$29.95	\$26.90	\$23.70

MARINE RELAY/SWITCH

6 WAY MEMBRANE SWITCH PANEL WITH RELAY BOX

An ultra compact 6-way 12VDC touch control panel to control devices in automotive, camping, or marine applications. It features an ultra thin and flexible membrane switch panel with almost no mounting depth requiring only a very small cut-out. The 6 buttons on the switch panel control 6 relays in the separate control box for switching on/off any connected devices with ease, with the switch panel connecting to the control box with an included 1m long ribbon cable. This gives you a completely waterproof (IP67) switch panel, with all the wiring taken care of behind your dash/panel, resulting in a neat and unobtrusive 6-way switch interface.

- IP67 rating on the switch panel
- Built-in resettable fuses



Specifications	SP-0900
Max current	10A per channel, 35A total
Touch Panel Dimensions	70(L) x 63(W) x 1(H)mm
Membrane Control Box Dimensions	135(L) x 90(W) x 33(H)mm

1 YEAR WARRANTY

	Cat.	Qty 1+	Qty 10+	Qty 25+
Switch Panel	SP-0900	\$99.95	\$89.95	\$79.95

FISH FINDER

WI-FI FISH FINDER WITH SMARTPHONE APP

A small spherical device to help amateur fisherman find their targets. Simply connect to it via Wi-Fi, load the Smartphone App, throw it into the water (tethered to a fishing line ideally), and the fish finder will transmit fish location and fish size data back to an Android or iOS equipped Smartphone/Tablet. In technical terms, the Wi-Fi transducer will pulse a sound wave outwards, the returned echoes are transmitted to the App. Water temperature readings are also viewable through the App which may help in boat positioning. Though this device can be tethered we recommend using it in lakes and other still bodies of water.



Wi-Fi fish finder App available for Android/iOS devices. Note: Only 5 devices can be registered to one fish finder and only one can be used at any time.

Specifications	GE-4250
Wi-Fi range	20m
Sonar frequency	125kHz
Sonar coverage	90°
Depth capacity	0.6m-20m
Power	3.7V rechargeable lithium battery (included)
Running time	5 hours fully charged
Charger	5VDC/500mA USB charger supplied
Dimensions	67(Dia.)mm

iPhone® not included



NEW LOW PRICE

1 YEAR WARRANTY

	Cat.	Qty 1+	Qty 3+	Qty 6+
Wi-Fi Fish Finder	GE-4250	\$179.00	\$160.95	\$142.95

MARINE AUDIO

NAVAL STYLE COMMUNICATIONS SPEAKER WITH GYMBOL MOUNT

This small but powerful unit delivers clear voice from either VHF, 27MHz or even HF communications receivers. It features a no-nonsense naval style in a light grey.

- It is very close to waterproof, in that the speaker cone is Mylar, the bezel is gasketed and the cord entry is IP65.
- Don't let the small dimensions fool you - it is a full 4W rated unit.



Specifications	AS-3186
Power handling	2.25WRMS
Power Max	5W
Impedance	80hm
Freq range	320Hz - 4,500kHz
Sensitivity	88dB/m
Dimensions	66(L) x 66(W) x 55(H)mm
Weight	185g
2.2m cable terminated to a 3.5 plug	
Bezel dimensions	65mm square, 55 deep

1 YEAR WARRANTY

	Cat.	Qty 1+	Qty 3+	Qty 6+
Comms Speaker	AS-3186	\$24.95	\$22.35	\$19.70

WATERPROOF MP3 PLAYER WITH RADIO & BLUETOOTH® TECHNOLOGY

A feature packed, waterproof stereo for the boat to entertain you while you're enjoying your water sport or activity. It features an AM/FM radio, aux audio input to play the tracks from an iPod®, a USB port to play MP3 files from an MP3 player or Flash drive, or wirelessly streamed music from your Bluetooth® enabled Smartphone or Tablet.

- IPX6 waterproof
- Bluetooth® audio streaming
- Rear USB
- Play music on USB
- AM/FM digital receiver
- Rear Aux line in
- Display type: LCD
- Power output: MOSFET 4 x 25WRMS
- Zero standby current
- Backup memory
- Stainless steel trim ring
- Dimensions: 345(L) x 90(W)mm



NEW 2015



RESPONSE

3 YEAR WARRANTY

	Cat.	Qty 1+	Qty 2+	Qty 4+
Waterproof MP3 Player	QM-3860	\$199.00	\$178.95	\$158.95

MARINE AUDIO (CONTINUED)

A WORD ABOUT JAYCAR/RESPONSE BRAND AUDIO PRODUCTS

Jaycar has been selling direct-import audio products for almost 30 years. In that time we have sold tens of thousands of general, Hi-Fi and car sound speakers, Home Cinema products, MP3 players, and thousands of car and marine head units.

RESPONSE

use actually make a lot of the national brand names, but we are legally prevented from telling you who they are). When Jaycar negotiates with a factory, we specify what we think is useful to you and what is rubbish (like rainbow coloured lighting displays).

We have developed an expertise with specialty buying staff and long-term relationships with factories that we can trust. In these pages you will find products that are not national brand names (Many of the factories that we

In buying such products from us, you get the same (or better) warranties, but the bonus sensible-specification products from a firm with a strong engineering background.

IN-DASH MARINE AM/FM RADIO WITH MP3 PLAYER

An attractive marine radio perfect for your boat but can be used for automotive purposes. In addition to standard AM/FM radio the front panel includes USB & SD card slots which allow playback of MP3s. There's also a 3.5mm auxiliary port so you can connect an iPod®, headphones, or Smartphone for playing back music. The unit can be controlled with the infrared remote or front panel interface. For audio tinkerers, a myriad of settings are available including bass, treble, balance, and fade settings. There are also rock, pop, and classical equalisation pre-sets to suit your taste in music. Installation is straightforward, just connect via the supplied 14pin plug, all speaker cables are labelled to streamline the install. The USB, SD card and AUX sockets all come with splashproof silicone covers.

- MP3/USB/SD Player
- Rust-resistant chassis
- ISO/DIN mountable
- Electric Detachable Panel
- UV-resistant faceplate and trim ring
- 3.5mm front panel aux input
- USB/SD front panel input
- Wireless infrared remote
- Power: 8.25WRMS - 8 Ohm x 4 / 13WRMS - 4 Ohm x 4
- Dimensions: 189(L) x 117(W) x 57(H)mm

Waterproof cover also available - QM-3819.

QM-3815



Can be used for automotive purposes



QM-3819

RESPONSE



	Cat.	Qty 1+	Qty 2+	Qty 4+
Marine Radio	QM-3815	\$99.95	\$89.95	\$79.95
Waterproof Cover	QM-3819	\$14.95	\$13.45	\$11.95

5" & 6.5" MARINE COAXIAL SPEAKERS

A pair of marine worthy speakers designed to withstand the demands of ocean use and provide excellent audio quality in your boat. Both models feature high salt and UV resistance and are fully splash proof thanks to the special indented design.

Specifications	CS-2410	CS-2412
Frequency	80-20KHz	65-20KHz
Sensitivity	88dB/W/M	89dB/W/M
Max Power	100W	120W
Magnet	5.3 oz	10oz
Voice Coil	25mm	25mm
Impedance	4 ohms	4 ohms
Woofers	Injection Cone	Injection Cone
Midrange and Tweeter	30mm Mylar Dome Tweeter	35mm Mylar Dome Tweeter
Dimensions:	A=150mm, B=135mm, C=111mm, D=45mm	A=180mm, B=164mm, C=128mm, D=60mm

See page 244 for chart

RESPONSE



	Cat.	Qty 1+	Qty 4+	Qty 10+
5" Pair	CS-2410	\$34.95	\$31.45	\$27.90
6.5" Pair	CS-2412	\$44.95	\$40.45	\$35.90

LET'S FIND EVERYTHING YOU NEED!

Marine Radio & Speaker Packages

+ MORE SPECS ON EACH PRODUCT IS SHOWN ABOVE

Package #1

- Combines our Marine Radio (QM-5815) with our 5" Marine Speakers. (CS-2410)



RESPONSE

Package #2

- Combines our Marine Radio (QM-5815) and our 6.5" Marine Speakers. (CS-2412)



RESPONSE

	Cat.	Qty 1+		Cat.	Qty 1+
Marine Radio & 5" Speakers	QM-3816	\$109.00	Marine Radio & 6.5" Speakers	QM-3817	\$119.00

HEAD UNITS & ACCESSORIES

IN-CAR ENTERTAINMENT

IN-DASH MP3 PLAYER WITH RADIO

With high capacity USB drives and SD cards being so cheap now, this is an excellent alternative to carrying around a glove box full of CDs - instead you can listen to your favourite MP3s directly from the USB/SD card slot. Featuring PLL AM/FM tuner with 18FM/12 AM presets and MP3/WMA playback you will never miss a beat with this in-dash MP3 player. Thanks to the lack of a CD drive, the mounting depth is quite shallow making it a breeze to install in tight space locations such as a glove box.

- MP3/WMA playback
- MP3 ID3 tag display
- 4 x 20WRMS power output
- Rotary volume encoder
- Multi band EQ
- PLL tuner with 18FM/12AM presets
- 2 channels x 2V line-out



RESPONSE



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
MP3 Player with Radio	QM-3781	\$99.95	\$89.95	\$79.95

IN-DASH MULTIMEDIA PLAYER WITH USB & BLUETOOTH®

A solid all-round performer, this in-car entertainment system plays various popular multimedia formats and connects with external media players and file storage devices in a number of ways. Featuring the latest in file sharing with Bluetooth, front panel SD card slot, USB port and aux-in; it supports MP3, JPEG and WMA files. It also has AM/FM radio with 18 x AM and 12 x FM programmable preset stations and plays DVDs, VCDs and CDs. This highly versatile head unit has further input/output options, including NTSC/PAL video out, subwoofer out, and a mic input to make it a fully functional handsfree car kit when paired with a Bluetooth-enabled mobile phone. Complete with flip-down and detachable panel with colour LCD and slimline remote control.

- Bluetooth file sharing and handsfree mobile phone capability
- Front USB port, SD/MMC card slot and aux-in
- PLL tuner with 18 x FM and 12 x AM presets
- DVD ± R/RW, CD-R/RW playback
- 4 channels x 20WRMS output (40WRMS max)
- 4-band equaliser (classic, pop, rock, flat)



RESPONSE



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Multimedia Player with USB	QM-3788	\$229.00	\$209.00	\$182.95

AMPLIFIER REMOTE SIGNAL SWITCHER

This device connects to the speaker output of your car's head unit or amplifier. Once it detects that there is audio playing it triggers a relay so you can trigger other audio components, including an amplifier or CD stacker.

- It features a 2-3 second delay to help avoid any turn-on pop in aftermarket amplifiers.
- Dimensions: 58(L) x 45(W) x 28(D)mm



NEW 2015



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0419	\$9.95	\$8.75	\$7.75

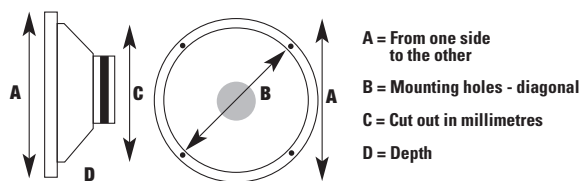
MARINE GRADE CIGARETTE PLUGS & SOCKETS ON PAGE 296

TECH TIP

NOTES ABOUT SPEAKER SPECIFICATIONS

- In an effort to assist customers choices between speakers, our entire speaker range have been assessed and measured under the same test conditions. Therefore making the resulting data in this catalogue comparable.
- All drivers have been measured for Thiele and Small parameters after a period of "Breaking In" for a minimum of 15 hours, and not tested straight off the shelf. This ensures a more long term and realistic result.

SPEAKER DIMENSIONS:



LET'S FIND EVERYTHING YOU NEED!

2 CHANNEL LINE LEVEL CONVERTER

Connects to the speaker output of your car's head unit and converts the high level speaker output to a high quality line level output for the aftermarket car amplifier. This device boosts the output signal up to 10V RMS (Peak); an improved signal quality less prone to interferences and produces better quality and powerful sound. It also provides a remote output to turn on the amplifier and other audio components. It features a Molex plug that makes the whole installation process quite easy.

- Super low distortion
- Adjustable output step down
- Adjustable line level output up to 10V
- Quick auto signal sense turn on
- Remote output trigger
- Dimensions: 120(W) x 76(H) x 26(D)mm



NEW 2015



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0416	\$29.95	\$26.95	\$23.70

4 CHANNEL HIGH QUALITY LINE LEVEL CONVERTER

An improved speaker to line level converter solution over the low cost and poor performance transformer type. This premium 4 channel LOC offers low distortion and exceptional power handling of up to 150W. Individual output gain controls are available and has a remote output for amplifier trigger. Uses a Molex plug and wiring harness for quick and simple installation.

- Super low distortion
- Adjustable output
- 150W Maximum input
- Remote output trigger
- Dimensions: 93(W) x 105(H) x 29(D)mm



NEW 2015



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0418	\$39.95	\$35.90	\$31.90

RESPONSE CAR SPEAKERS

Low cost doesn't mean low quality. Coax speakers are an ideal replacement for the standard equipment stereo speakers you get in the average car.

All are equipped with titanium coated fibre woofers and silk dome tweeters for smooth high frequency response.

RESPONSE 4" COAX 2 WAY CAR SPEAKERS

Specifications	CS-2310
Power handling	15WRMS
Nominal impedance	4 ohms
Frequency response	90Hz - 18kHz
Sensitivity	83dB SPL @1W, 1m
Qms	3.2
Qes	1.85
Qts	1.18
Vas	1.45 litres
Fo	122Hz

• Sold as a pair

↑	A	B	C	D	Cat.	Qty 1+	Qty 4+	Qty 10+
	102	115	93	42	CS-2310	\$29.95	\$26.90	\$23.70



RESPONSE



RESPONSE 5" COAX 2 WAY CAR SPEAKERS

Specifications	CS-2312
Power handling	17WRMS
Nominal impedance	4 ohms
Frequency response	70Hz - 18kHz
Sensitivity	85dB SPL @1W, 1m
Qms	4.28
Qes	1.88
Qts	1.31
Vas	3.31 litres
Fo	106Hz

• Sold as a pair

↑	A	B	C	D	Cat.	Qty 1+	Qty 4+	Qty 10+
	130	138	115	44	CS-2312	\$34.95	\$31.45	\$27.90



RESPONSE



RESPONSE 6.5" COAX 2 WAY CAR SPEAKERS

Specifications	CS-2314
Power handling	22WRMS
Nominal impedance	4 ohms
Frequency response	60Hz - 20kHz
Sensitivity	88dB SPL @1W, 1m
Qms	4.88
Qes	1.5
Qts	1.15
Vas	10.18 litres
Fo	75Hz

• Sold as a pair

↑	A	B	C	D	Cat.	Qty 1+	Qty 4+	Qty 10+
	166	158	142	52	CS-2314	\$39.95	\$35.90	\$31.90



RESPONSE



RESPONSE 6 X 9" COAX 2 WAY CAR SPEAKERS

Specifications	CS-2316
Power handling	27WRMS
Nominal impedance	4 ohms
Frequency response	55Hz - 18kHz
Sensitivity	86dB SPL @1W, 1m
Qms	4.76
Qes	1.57
Qts	1.18
Vas	17.3 litres
Fs	61Hz

• Sold as a pair

↑	A	B	C	D	Cat.	Qty 1+	Qty 4+	Qty 10+
	236 x 165	205	218 x 148	75	CS-2316	\$54.95	\$49.45	\$43.90



RESPONSE



LET'S FIND EVERYTHING YOU NEED!

SPEAKER CABLE - EXTRA HEAVY DUTY FIGURE 8

Cable is 2 x 79/0.2mm.

ROLL LENGTH 30 METRES

SEE PAGE 212 FOR DC POWER CABLE

Cross Section



QUICK RELEASE CAR AUDIO POWER CONNECTOR

Designed to offer safe and fast removal of your high power car audio, secondary battery or other high current DC set up. The unit acts as a heavy duty quick release plug and socket that connects positive, negative and remote wires. It has two components - one end to connect to your equipment and the other to your power source. Capable of handling up to 140A. Comes with a bracket for secure mounting. The device is tough enough and made from high quality ABS plastic.

• Dimensions: 62(L) x 48(W) x 31(D)mm

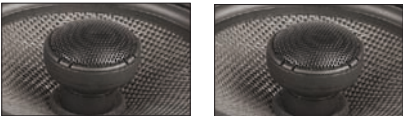
NEW 2015



↑	Cat.	1+ Rolls	4+ Rolls	10+ Rolls
30m	WB-1713	\$74.95	\$67.45	\$59.95

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HC-4067	\$29.95	\$26.95	\$23.70

RESPONSE PRECISION KEVLAR COAXIAL CAR SPEAKERS



All models are now paired with Soft Dome Tweeters!

Back by popular demand! These are our ever popular Response Precision Kevlar Coaxial Speakers that has won many awards and magazine recommendations in the past, only with a new look. The Kevlar speaker cone is now supplied in Black but it still retains its outstanding performance that we are all accustomed to. The tweeters are still the original soft dome tweeter that provide

clean, crisp sounds and maintains a natural and smooth balanced sound; nestled in an adjustable bracket for optimal sound trajectory. Virtually unchanged in design and performance, we have put our efforts in changing one thing; the price. Now at a more competitive price points; these coaxial speakers are great value for money topped with award winning performance.

4" KEVLAR/ DOME TWEETER 2 WAY COAXIAL SPEAKERS

Specifications	CS-2400
Power handling	40WRMS
Nominal impedance	4 ohms
Frequency response	70Hz - 7kHz
Sensitivity	88.5dB SPL @ 2.83V, 1m
Qms	10.25
Qes	1.12
Qts	1.01
Vas	1.7 litres
Fs	115Hz

• Sold as a pair



↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	102	90	93	47	CS-2400	\$79.95	\$71.95	\$63.95

5" KEVLAR/ DOME TWEETER 2 WAY COAXIAL SPEAKERS

Specifications:	CS-2401
Power handling	50WRMS
Nominal impedance	4 ohms
Frequency response	80Hz-20kHz
Sensitivity	89dB SPL @ 1W, 1m
Re	3.3 ohms
Qms	6.91
Qes	0.76
Qts	0.68
Vas	5.27 litres
Fs	87.6Hz

• Sold as a pair



↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	130	118	120	62	CS-2401	\$99.95	\$89.95	\$79.95

6.5" KEVLAR/ DOME TWEETER 2 WAY COAXIAL SPEAKERS

Specifications:	CS-2402
Power handling	75WRMS
Nominal impedance	4 ohms
Frequency response	65Hz-20kHz
Sensitivity	89dB SPL @ 1W, 1m
Re	3.3 ohms
Qms	5.90
Qes	1.23
Qts	1.02
Vas	5.94 litres
Fs	98Hz

• Sold as a pair



↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	178	157	144	68	CS-2402	\$129.00	\$115.95	\$102.95

6 X 9" KEVLAR/ DOME TWEETER 2 WAY COAXIAL SPEAKERS

Specifications:	CS-2403
Power handling	75WRMS
Nominal impedance	4 ohms
Frequency response	55Hz-20kHz
Sensitivity	90dB SPL @ 1W, 1m
Re	3.4 ohms
Qms	7.99
Qes	0.79
Qts	0.71
Vas	31.1 litres
Fs	53.2Hz

• Sold as a pair



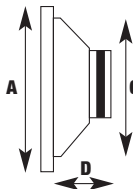
↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	235x163	220x150	222	90	CS-2403	\$149.00	\$133.95	\$118.95

TECH TALK!

NOTES ABOUT SPEAKER SPECIFICATIONS

- In an effort to assist customers choices between speakers, our entire speaker range have been assessed and measured under the same test conditions. Therefore making the resulting data in this catalogue comparable.
- All drivers have been measured for Thiele and Small parameters after a period of "Breaking In" for a minimum of 15 hours, and not tested straight off the shelf. This ensures a more long term and realistic result.

Speaker Dimensions:



- A = From one side to the other
- B = Mounting holes - diagonal
- C = Cut out in millimetres
- D = Depth

DAB+ RECEIVER

IN-CAR DAB+ RECEIVER WITH FM TRANSMITTER

Add crystal clear digital radio to your car with ease. Just connect this unit to your cigarette lighter socket and then either tune in on the FM band on the car radio or use the supplied 3.5mm audio cable for direct connection. Features radio stabilisation technology to ensure good reception at high speeds as well as a USB socket with adaptors to charge Smartphones and Tablets. Also includes a bright 35mm (1.44") colour TFT display so you can browse through stations easily.

- Displays channel name and radio text
- 3.5mm AUX in
- 3.5mm Audio cable included
- Antenna cable included
- Real time auto clock
- 3.5mm Line out
- Supports up to 99 preset DAB+ stations

Specifications	
Power input	12-24VDC
USB output	5VDC 1.5A
FM Transmitting Frequency	87.5 - 108MHz
Included adaptors	USB, Micro-B, USB Mini, Nokia plug
Dimensions	190(L) x 66(W) x 60(D)mm



NOT AVAILABLE IN NEW ZEALAND



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
DAB+ Receiver with FM Transmitter	AR-1902	\$119.00	\$106.95	\$94.95

MONITORS

7" TFT LCD WIDESCREEN COLOUR MONITOR WITH IR REMOTE

This 7" TFT Widescreen LCD Monitor delivers high resolution pictures in widescreen format and clear sound reproduction through its inbuilt speaker. It is extremely lightweight and is suitable for all sorts of mobile and fixed monitoring applications. Suitable for in-car and home entertainment, use it to watch DVDs, PS2®, XBOX®, etc. can be used for monitoring or surveillance purposes.

Two RCA composite video inputs and one audio input are provided for a multi source system. This is truly a versatile monitor, it has low power consumption, wide viewing angle, and is NTSC and PAL compatible.

It is equipped with On Screen Display enabling the user to easily control the colour, contrast, hue, brightness, and volume. A very slim and small infrared remote control is included. It has reverse image capability adjustable by pressing a button. The mirror-image function on this unit makes it ideal for buses with a camera to view behind while reversing.

Unit comes with an adjustable swivel bracket with double sided tape for adhesion on clean flat surfaces. A 4 pin mini din to 2 RCA and power cable is also supplied.

Specification	QM-3752
System	NTSC/PAL
Power Input	12-24VDC
Power Consumption	10W
Screen Size	7inch (diagonal width)
Display Method	TFT Active Matrix System
Resolution	1140(h) x 234(v)

TECH TALK!

*Works with most, but not all widescreen sources. Will default to modified widescreen in some cases.



NEW & IMPROVED!

Ideal for trucks

WIRELESS STEREO HEADPHONES FOR QM-3752

Add a pair of wireless headphones and enjoy automotive bliss. Soft cushioned earpads for comfort, switchable between channel A and B.

Specifications	AA-2047
Driver diameter	27mm
Nominal impedance	32 ohms
Frequency response	120Hz - 20kHz
Sensitivity	100dB



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
7" Colour Monitor	QM-3752	\$119.00	\$106.95	\$94.95
Wireless Headphones to suit QM-3752	AA-2047	\$39.95	\$35.90	\$31.90

9" IN-CAR LCD COLOUR MONITOR

The perfect travelling companion, especially on long road trips. This 9" widescreen LCD delivers crisp high resolution images for your in-car viewing pleasure. Connect your source devices to entertain passengers with DVD movies or keep the kids amused with Xbox® or Playstation®. Featuring multisource inputs and reverse image function, it also doubles as a reversing camera monitor. Adjust the volume, colour, contrast, brightness and select your AV input with the front panel controls or simply use the slimline remote control. The tilting bracket gives you several in-car options, including dash and headrest mounting.

- Dual video and single audio input leads
- Front panel AV input and audio output
- Includes mounting bracket and remote control

Specifications	QM-3761
System	NTSC/PAL
Screen size	9" widescreen - 4:3 & 16:9 switchable format
Resolution	800 x 480
Power input	12VDC
Power consumption	12W



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
9" Colour Monitor	QM-3761	\$129.00	\$115.95	\$102.95

IN-CAR ENTERTAINMENT

MONITORS (CONTINUED)

9" HIGH RESOLUTION AUTO LCD MONITOR WITH HDMI INPUT - 12/24V

Ideal for the car or truck this 9" display monitor supplied with anti-glare shield to improve visibility during daylight. It incorporates composite RCA and HDMI inputs making it an ideal monitor solution for security, reversing or multimedia entertainment. Supplied with power cable and user manual.

Specifications	QM-3874
Screen Size	9"
Screen Ratio	16:9
Resolution	RGB 800 x 480
Backlight	LED, 250cd/m2
Contrast	500/1
View Angle	UP 50°, Down 70°, Left 70°, Right 70°
System	NTSC & PAL (Auto switch)
OSD Control	Brightness, Contrast, Colour, Volume
Power	12-24VDC, 7W
AV input	2 way video input, 2 way audio input
HDMI Input	1 x HDMI input (including audio)
Dimensions	240(W) x 163(H) x 26(D)mm



NEW
2015

1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
9" Colour Monitor with HDMI	QM-3874	\$199.00	\$178.95	\$158.95

9" LCD MONITOR WITH 4 CHANNEL DVR - 12/24V

Connect up to 4 cameras and record all 4 channels with this 12/24V mobile DVR. Incorporates a large 9" colour display in a tough metal chassis with sunshade. It adopts industry standard 4G shockproof technology to ensure clear continuous video recording onto an SD card (available separately) while on the move.

It's ideal for truck, bus, caravans and other heavy duty mobile installation.

- Supplied with power cable, remote control and user manual.

Specifications	QM-3872
Screen Size	9"
Screen Ratio	16:9
Resolution	800 x 480
Backlight	LED, 300cd/m ²
Image Rotation	UP/Down and Left/Right
View Angle	UP 50°, Down 70°, Left 70°, Right 70°
Display	1,2,4 channel
System	NTSC & PAL (Auto switch)
Recording	4 Ch 640 x 480 at 60fps
Storage	SD, up to 32GB
Storage Format	AVI
OSD Control	Brightness, Contrast, Colour, Volume
Power	12-24VDC, 8W
AV input	4 Video inputs, 1 audio input
Dimensions	240(W) x 163(H) x 26(D)mm



NEW
2015

1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
9" Colour Monitor with 4 Channel DVR	QM-3872	\$279.00	\$255.00	\$225.00

CAR SIGNAL PROCESSOR

6 CHANNEL CAR AUDIO DIGITAL SIGNAL PROCESSOR

If you're an ultimate tweaker who's crazy about sound quality, then this 6 Channel car audio digital signal processor will be a welcome addition to your system. After installing the software provided, you plug your PC or laptop into the USB port. A detailed control panel will appear on your computer screen that lets you set virtually every tuneable audio parameter to achieve the highest musical fidelity possible in your car. The visual display shows the resulting sound curve of each setting, so you'll know for sure how your adjustments are affecting audio output.

- Precise digital adjustment of crossover point
- 6 channel individual input
- Low and High level input applicable
- AUX 2 channel input and optical input
- Adjustable sensitivity from 0.5V to 22VDC
- DSP settings and adjustments made via laptop or PC through USB port
- Phase adjustment from 0 to 180 degrees
- Software and USB cable included
- Dimensions: 210(L) x 120(W) x 45(D)mm



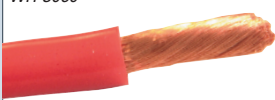
NEW
2015

2
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	AA-0468	\$529.00	\$475.00	\$425.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$3.60
WH-3060



56A DC CABLE

P212

FROM
\$7.95
WH-5525



HEATSHRINK

P215

FROM
\$9.95
HP-1235



DUNE TUBE

P218

FROM
\$64.95
AA-0442



AMPLIFIER WIRING KIT

P250

CLASS AB CAR AMPLIFIER

4 X 70WRMS CLASS AB CAR AMPLIFIER

This is a great value full range class AB amplifier. All channels offer fully variable high and low pass filters, bass boost and pass through RCA pre-outs allowing you to link to additional amplifiers without the additional RCA splitters.

Specifications	AA-0462
Power/channel @ 4 Ohm 14.4V	70WRMS x 4
Power/channel @ 2 Ohm 14.4V	100WRMS x 4
Power/channel @ 4 Ohm 14.4V bridged	200WRMS x 2
Signal/noise ratio	>90dB
Input sensitivity	150mV to 8V
Low pass filter	50-500Hz @12dB
High pass filter	50-500Hz @12dB
Bass boost	0-6dB @45Hz
Pass thru RCA	Yes
Dimensions	200(L) x 170(W) x 46(D)mm


NEW
2015

2
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
4 x 70WRMS Class AB	AA-0462	\$229.00	\$209.00	\$182.95

CLASS D CAR AMPLIFIERS

Introducing our new Class-D Full range digital ultra high-efficiency car amplifiers and Monoblocks; offering outstanding sound quality and amazing power that convert your car into a truly pleasant audio entertainment space. The physical footprint is extremely compact

and low profile that they will easily clear the space underneath your car seat; providing easy and unobtrusive installation. Don't be fooled by the size, these amplifiers have some serious grunt with sound quality to match.

4 X 75WRMS CLASS D CAR AMPLIFIER

This is a high efficiency class D subwoofer amplifier in an extremely compact chassis. It has dual MOSFET power supplies and is stable driving 1 or 2 ohm loads. In addition, you get adjustable phase shift, bass boost, variable low pass & subsonic filters and master/slave operation.

Specifications:	AA-0464
Power/channel @ 4 Ohm 14.4V	75WRMS x 4
Power/channel @ 2 Ohm 14.4V	130WRMS x 4
Power/channel @ 4 Ohm 14.4V bridged	260WRMS x 2
Signal/noise ratio	>100dB
Input sensitivity	200mV to 9V
Low pass filter	50-500Hz @12dB
High pass filter	50-500Hz @12dB
Bass boost	0-12dB @45Hz
Pass thru RCA	Yes
Dimensions	220(L) x 130(W) x 55(D)mm


NEW
2015

2
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
4 x 75WRMS Class D	AA-0464	\$299.00	\$269.00	\$239.00

700WRMS CLASS D CAR AMPLIFIER

This is a full range class D amplifier with slightly higher power than the entry level AB class amplifier. It offers 4 x 75WRMS per channel with bridged power up to 260WRMS. Variable bass boost up to 12dB and variable high and low pass filters also included.

Specifications:	AA-0466
Power/channel @ 1 Ohm 14.4V	700WRMS
Power/channel @ 2 Ohm 14.4V	420WRMS
Power/channel @ 4 Ohm 14.4V	247WRMS
Signal/noise ratio	>90dB
Input sensitivity	200mV to 9V
Low pass filter	30-300Hz @18dB octave
Subsonic filter	10-60Hz @18dB octave
Bass boost	0-12dB @45Hz
Phase shift	0-180°
Pass thru RCA	No
Dimensions	220(L) x 120(W) x 48(H)mm


NEW
2015

2
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
700WRMS Class D	AA-0466	\$259.00	\$235.00	\$209.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$2.75
PT-4537


QUICK SPLICE CONNECTORS P183

FROM
\$11.95
AX-3680


NOISE REDUCTION MATERIAL P252

FROM
\$1.85
HP-1200


CABLE TIES P218

FROM
\$39.95
QM-1591


SOUND LEVEL METERS P163

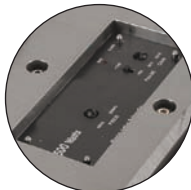
IN-CAR SOUND

ACTIVE SUBWOOFERS

8" UNDER SEAT ACTIVE SUBWOOFER

Add some bottom end to your car audio, even if you don't have room for a sub. MOSFET output stage for low distortion and noise. The compact size means it will fit under a seat and is robust enough to take some knocks. Ideal for utes, convertibles and trucks.

Specifications	CS-2286
Power output	55WRMS
Frequency response	60 - 480Hz
S/N ratio	70dB
THD	0.06%
Input sensitivity	Line level 200mV
	Speaker level 800mV
Low pass filter	40 - 280Hz @ 12dB/octave
Variable gain	0 - 18dB @ 50Hz
Phase shift	-180 - 180
Dimensions	360(L) x 250(W) x 80(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
8" Active Subwoofer	CS-2286	\$149.00	\$133.95	\$118.95

CAR AUDIO ACCESSORIES

LINE LEVEL CONTROL (ATTENUATOR)

This unit when fitted in a signal line allows you to adjust downwards excessive signal levels. You may have, for example a source from a CD/MP3 player and a tuner. Often one source is too loud (at line level) to the other.

- Stereo
- RCA line sockets in/out
- Measures 60(L) x 55(W) x 37(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-3078	\$9.95	\$8.75	\$7.75

CAR RADIO SUPPRESSOR

Traditional condenser type.



	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-3060	\$3.95	\$3.45	\$3.15

CAR NOISE FILTERS

Car noise filters or hot line filters are used to reduce noise and interference entering your car stereo through the power lead. The car alternator is one of the most common sources of problems, and these essential devices can help to reduce this.

10A DC NOISE FILTER

The filter itself arrests any noise on the DC power supply to car stereos, CBs etc better than ever. Most importantly it enables the installer to mount the unit without drilling mounting holes. You can secure this unit with either short or long cable ties. It will also "saddle" on a wiring loom if necessary. Has 10A rated + & - DC leads & separate earth lead which should be terminated to chassis.

- Measures 90(L) x 60(W) x 33(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
10A	AA-3074	\$14.95	\$13.35	\$11.70

GROUND LOOP ISOLATORS

GROUND LOOP ISOLATOR (STEREO) 3.5MM

Used to eliminate ground loop problems in audio installations. The unit has a 3.5mm stereo sockets on both ends. Suitable for use with laptops, mp3 players, iPods® etc. Note: Units AA-3074/78/84 & 86 can be fastened to any surface, fitting etc by simple cable clamps.



	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-3086	\$9.95	\$8.75	\$7.75

GROUND LOOP ISOLATOR (STEREO) RCA

Used to eliminate ground loop problems (usually manifested as a low hum) in audio connections. Earthing brown ground wires sometimes helps even more.



	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-3084	\$9.95	\$8.75	\$7.75

SPEAKER (HIGH LEVEL) TO LINE LEVEL CONVERTER

Converts high level (high power) speaker signals back down to low level (i.e. line or <1volt signals). You can then safely use those signals as line inputs to amps without potential damage to amps or other speakers. Features variable attenuators to reduce signal up to 6 times.

- RCA socket out (stereo)
- External dimensions: 90(L) x 35(H) x 57(W)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0482	\$14.95	\$13.35	\$11.70

LET'S FIND EVERYTHING YOU NEED!

CAR AMPLIFIER WIRING KITS

Complete wiring kits for installing an amplifier into your vehicle. Everything you need, down to the cable ties and screws. Save \$\$ on the individual parts.

8GA WIRING KIT

- 6m x 8GA power cables
- 9m x 16GA speaker wire
- 5.2m stereo RCA interconnect
- 5.2m 18GA remote wire
- Gold plated fuse holder
- 40A fuse
- Loom tubing, gold plated crimp connectors, grommets, cable ties & screws.

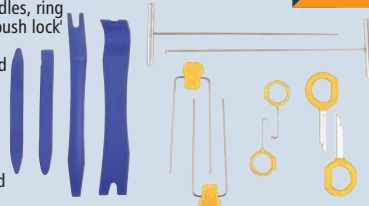


	Cat.	Qty 1+	Qty 4+	Qty 10+
8G Wiring Kit	AA-0442	\$64.95	\$58.50	\$51.95

12 PIECE CAR AUDIO & INTERIOR REMOVAL KIT

Make the DIY job easier using this Kit. Prevent scratching and damaging your vehicle interior with specialised tools. Made from a strong ABS plastic. Includes various lever handles, ring hooks, straight rods, and plastic 'push lock' retainers to help remove car exterior and interior trim, dash and door panels. Fits most models.

- Lever handles supplied:
A: 190(L)mm, B: 210(L)mm,
C: 155(L)mm and D: 150(L)mm
- Straight hook: 230(L)mm/Curved hook: 250(L)mm

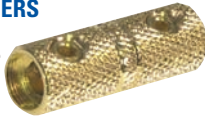


	Cat.	Qty 1+	Qty 4+	Qty 10+
Removal Kit	TH-2339	\$19.95	\$17.95	\$15.70

GOLD CAR SOUND CONNECTORS

GOLD PLATED HIGH CURRENT CABLE JOINERS

If you have ever tried to connect, crimp or solder 8GA or even 4GA cable you will understand how convenient these gold-plated brass connectors are. Cable termination is via gold grub screws and joiner is supplied with small transparent insulating heatshrink tube.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Suit 8GA cable	HC-4065	\$7.95	\$6.95	\$6.25
Suit 4GA cable	HC-4064	\$7.95	\$6.95	\$6.25

GOLD PLATED POWER TERMINALS

Make terminating large power cables simple and neat, with no need for crimping. Each has a grub screw for attaching to the power cable, and is gold plated for a professional look.

AMP-KING

0GA

To run 0GA cables to equipment and battery terminals
• 8mm bolt hole • 52mm length



2GA

To run 2GA cables to equipment and battery terminals
• 8mm bolt hole • 57mm length



4GA

To run 4GA cables to equipment and battery terminals
• 8mm bolt hole • 56mm length

0GA TO 4GA Gold Plated Adaptor Terminal
Allows connection of 0GA cable to 4GA screw down connections, such as on our gold battery terminals or car amplifiers
• 8.6mm shaft • 55mm length

WE NOW STOCK 0 GAUGE CABLE SEE PAGE 213

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
0GA	HC-4068	\$8.95	\$7.95	\$6.95
2GA	HC-4066	\$8.95	\$7.95	\$6.95
0 - 4GA	HC-4069	\$8.95	\$7.95	\$6.95
4GA	HC-4062	\$8.95	\$7.95	\$6.95

GOLD PLATED TERMINALS

Supplied in pairs. 1 red and 1 black.

8GA QC GOLD CONNECTORS SMALL EYE RED & BLACK

Specifications	
Hole size	3.7mm
Cable hole diameter	4.8mm
Size including cover	35mm
Metal thickness	1mm

AMP-KING



↑	Per pair	Cat.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black		PT-4560	\$2.75	\$2.45	\$2.15

8GA QC GOLD CONNECTORS LARGE EYE RED & BLACK

Suits thinner cable (8GA):

Specifications	
Hole size	8.4mm
Cable hole dia	4.8mm
Size including cover	42mm

AMP-KING



↑	Per pair	Cat.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black		PT-4562	\$2.95	\$2.60	\$2.30

4GA QC GOLD CONNECTORS LARGE EYE RED & BLACK

Suits Large Cable (4GA):

Specifications	
Hole size	8.4mm
Cable hole dia	8mm
Size including cover	50mm
Metal thickness	1.5mm

AMP-KING



↑	Per pair	Cat.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black		PT-4564	\$3.95	\$3.45	\$3.15

2GA QC GOLD CONNECTORS EYE RED & BLACK

Suits 2GA cable.

Specifications	
Eye hole size	12.7mm
Cable hole dia.	9.6mm
Size including cover	60mm
Metal thickness	1.5mm

AMP-KING



↑	Per pair	Cat.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black		PT-4565	\$5.95	\$5.25	\$4.75

TECH TALK!

GA = gauge or standard wire size

0GA - Outside dia of 15mm - actual cable is 45mm²

2GA - Outside dia of 12mm - actual cable is 35mm²

4GA - Outside dia of 10mm - actual cable is 20mm²

8GA - Outside dia of 6mm - actual cable is 8mm²

0GA QC GOLD CONNECTORS EYE RED & BLACK

Suits thick cable (0GA)

Specifications	
Hole size	8.4mm
Cable hole dia	11.8mm
Size including cover	60mm
Metal thickness	1.6mm



↑	Per Pair	Cat.	Qty 1+	Qty 4+	Qty 10+
Red & Black		PT-4567	\$6.95	\$6.25	\$5.50

8GA QC GOLD CONNECTORS FORKED SPADE TERMINALS

Suits thinner cable (8GA):

Specifications	
Hole size	3.7mm
Cable hole dia	4.8mm
Size including cover	33mm



AMP-KING

↑	Per pair	Cat.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black		PT-4566	\$2.95	\$2.60	\$2.30

QC CONNECTORS FORKED SPADES

Standard quick connect lugs that fit speaker terminals etc.
• Cable hole diameter - 3.7mm

AMP-KING



↑	Per pair	Cat.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black		PT-4568	\$2.50	\$2.21	\$1.95

GOLD FUSED POWER DISTRIBUTION BLOCKS

TWO WAY DISTRIBUTION BLOCK

This block will accept one 4GA (thick) cable. The power passes through fuses, then to 2 outputs for 8GA (thin) cable.

• Accepts 5AG fuses - fuses extra

AMP-KING



NEW LOW PRICE

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
102(L) x 51(W) x 32(H)mm	SZ-2070	\$19.95	\$17.70	\$15.70

GOLD POWER DISTRIBUTION BLOCK

This block will accept one 4GA wire in, and distribute to four 8GA out.

• Size includes mounting bracket

AMP-KING



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
63(L) x 50(W) x 25(H)mm	HC-4020	\$12.95	\$11.35	\$10.35

16 WAY 100A BRASS DISTRIBUTION BAR

An ideal way to distribute high current paths. An 8mm stud provides for incoming cable and distribution is via 16 screw terminals with 7mm cable entry holes.

• Solid brass with high quality plastic bridge mounts
• Rated for 100A, suitable for high-power car audio power distribution or multiple earth links



DO NOT USE FOR 240V MAINS

SEE OUR 8 WAY VERSION ON PAGE 340

AMP-KING

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
112(L) x 18(W) x 12(H)mm	SZ-2004	\$9.95	\$8.75	\$7.75

CYLINDRICAL FUSES & HOLDERS

GOLD FUSEHOLDER WITH MOUNTING BRACKET

Gold contacts and will accept both 8GA & 4GA cable. A mounting bracket is incorporated. Length 80mm - accepts 5AG fuses.

AMP-KING



↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
5AG		SZ-2060	\$9.95	\$8.75	\$7.75

5AG GOLD FUSES

These fuses suit our fuseholders shown here. They have gold plated ends - and the inside conductor is also gold. Available in a range of current ratings.

• Fuse size 38(L) x 10(Dia)mm

AMP-KING



↑	Current	Cat.	Qty 1+	Qty 4+	Qty 10+
20A		SF-1970	\$2.25	\$1.95	\$1.80
30A		SF-1972	\$2.25	\$1.95	\$1.80
40A		SF-1974	\$2.25	\$1.95	\$1.80
50A		SF-1976	\$2.25	\$1.95	\$1.80
60A		SF-1978	\$2.25	\$1.95	\$1.80

VEHICLE NOISE REDUCTION

ACOUSTIC SOUND ABSORBING DEADENING MATERIALS

Ideal for car sound installations. One of the most hostile environments for a loudspeaker is in the door of a car. It is made out of flexible sheet steel which, when it is not vibrating & absorbing energy by rattling or buzzing, is reflecting energy all over the place! To produce Hi-Fi sound in a car you not only need to control the acoustics of the car environment. As any professional will tell you, it's the installation which makes for sound quality more than any other factor.

HEAVY DUTY SOUND BARRIER DAMPING MATERIAL

This is basically a flexible plastic-like material that forms an attenuating / reflecting sound barrier. The product is made of 25% PVC loaded and spread evenly with barium mineral powder which takes up the other 75% (by weight) of the product. The barium mineral is very heavy and makes the vinyl heavy and impenetrable to sound waves. It's sort of like if lead was plastic! It weighs 4kgs per square metre. It is ideal for any surface that needs to be 'deaden' e.g. car door or floor panels. It completely damps (ie prevents) any panel resonating from high power speakers. It is also amazing for attenuating road noise from steel car floors, etc. It can be cut with a hobby knife or good scissors etc. The material is held in place with spray or gel contact cement. One sheet is generally enough for the average car door. This product is superior to the AX-3680 previously sold.

- Supplied in a polyethylene bag.

Specifications	AX-3680
Sheet:	700 x 330 x 2.3mm thick (approx)
Sound transmission class:	26
Humidity:	Unaffected
Stability:	Indefinite

Specifications - Chemical Resistance	
Petrol/Diesel:	Moderate
Acetone:	Good
10% HCl:	Good
10% NaOH:	Poor
Specifications - Mechanical Properties	
Density:	1.74 g/cm ³
Tensile:	3000N/50mm
Elongation:	<0.2%
Working Temp:	0°C to 95°C

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Per Sheet	AX-3680	\$11.95	\$10.70	\$9.50

SOUND ABSORPTION MAT FOR EQUIPMENT

The noise of modern equipment can really annoy end users. To solve this with your equipment, we have sourced this high quality sound absorption material which is quick and easy to install. The honeycomb material is chosen specifically due to its ability to reduce fan noise, vibrations, compressors and motors. Cooling fans in equipment is a particular annoyance to users and this material is perfect for reducing sound levels! With it's self adhesive backing, just cut to size and stick on the inside of your equipment and installation is completed. No mess or fuss. Made to UL94-VO flammability classification.

- Size: 140 x 180mm, 2 sheets per pack.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Pack of 2	AX-3660	\$14.95	\$13.35	\$11.70

SELF-ADHESIVE SOUND ABSORBING FOAM

The perfect ultra light weight insulator to use in conjunction with AX-3687. This durable crush and tear-resistant material has the highest heat blocking properties available in a single layer synthetic foam-type material. Not affected by oil and does not absorb water. It provides acoustic isolation and excellent thermal insulation for roof, firewall, floor, quarter panels, doors and even as an under bonnet liner. Adhesive backed for easy installation.

- Size: 660 x 330mm / Thickness: 5mm
- Temperature range: -15 - 100°C

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Sheet	AX-3662	\$14.95	\$13.35	\$11.70

GIFT CARD

Can't find what to buy?
Give a Jaycar Gift card
and let them choose!



BUTYL BASED SOUND DEADENING MATERIAL

Give your vibrating buzz-box a luxury car ride with this butyl-based, foil backed sound deadening material. By adding weight to the metal panels of your car, such as door skins, boot lids, quarter panels, etc, you can stop nasty vibrations, reduce road noise, and give your doors and boot a nice solid "thud" when they shut. Each sheet is self-adhesive, and can be easily moulded, cut and stuck onto virtually any metal surface of your vehicle's body, giving you a pleasant, quiet and comfortable ride. Combine with our AX-3662 Sound Absorbing foam to add thermal insulation and eliminate low frequency humming from big exhaust systems for an even more comfortable vehicle interior.

- Size: 900 x 330mm / Thickness: 1.5mm
- Temperature range: -10 - 110°C

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Sheet	AX-3687	\$29.95	\$26.90	\$23.70

COMBINATION BUTYL/FOAM SUPER SOUND DEADENER

Combining both the sound deadening properties of butyl material, and insulating properties of honeycomb foam, this is an easy single application solution for complete sound deadening and isolation that also offers thermal insulation. Consisting of a layer of our AX-3687 Butyl Based sound deadener and a 3.0mm thick layer of honeycomb foam (similar to our AX-3662), lining the cabin of your vehicle with these sound deadening sheets will give you drastically reduced road noise, less panel vibration and a cooler cabin temperature. Application is easy with the self adhesive backing and ability to mould to the shape of the panel. Ideal for door skins, head linings, door cards and under bonnet insulation.

- Size: 660 x 330mm / Thickness: 4.5mm (1.5mm butyl, 3.0mm foam)
- Temperature range: -10 - 100°C

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Sheet	AX-3689	\$29.95	\$26.90	\$23.70

SOUND DAMPENING PAD 12"

Mainly designed for car audio, but could be used in any speaker application. This pad is installed inside the door skins opposite the back of the speaker drivers. It absorbs standing waves and resonances so you get maximum performance. Includes cyanoacrylate glue for installation.

- Suitable for subs 10 - 15"

↑	Cat.	Qty 1+
	AX-3666	\$4.95

TECH TALK!

TECHNICAL DATA ON OUR ACOUSTIC PRODUCTS

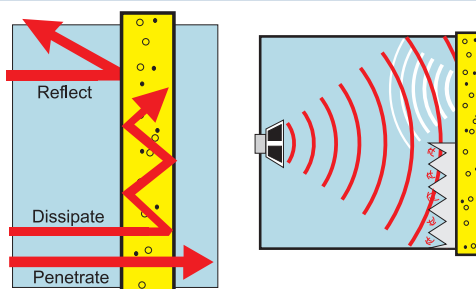
SOUND PATHS HITTING A FLAT SURFACE

Thickness & Absorption Performance

The basic rule of thumb here is the thicker the acoustic material the better it absorbs over a wide range of noise - especially at lower frequencies.

When sound hits any surface, it takes three paths, some goes through the surface, some dissipates within it and some reflects back off the surface. Jaycar acoustic products work primarily on attenuating reflected noise, but also helps retain dissipated noise.

With its anechoic wedge surface, Jaycar acoustic foam deflects and dissipates sound energy better than flat-surface or standard convoluted materials.



FM TRANSMITTERS

MP3 FM MODULATOR WITH REMOTE - 12/24V

Simply plug in to your cigarette lighter socket, this unit will play MP3 tracks directly through your car stereo through the FM band. Music can be stored on an SD/MMC card, USB memory stick or an external media player (iPods®, MP3 players) can be plugged in via the auxiliary input. It has a backlit LCD and a fully adjustable arm for multi angle viewing. It also remembers the last played frequency, song and volume.

- Accepts SD/MMC, USB or aux input
- FM Frequency: 87.5 to 108MHz
- 12V - 24VDC operation
- Supports folders
- Includes infrared remote control and 3.5mm AUX lead
- Dimensions: 130(L) x 40(W) x 25(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3136	\$14.95	\$13.45	\$11.95

RECHARGEABLE VISOR MOUNT HANDSFREE KIT WITH BLUETOOTH® TECHNOLOGY

Safely and comfortably make and receive mobile phone calls whilst driving with this user friendly visor mounted Bluetooth car kit. This compact and lightweight kit features built-in highly sensitive microphone, high powered loudspeaker, and dual standby allowing two phones to connect simultaneously, which is very handy when you own two phones or share the car with another person. The built-in memory allows it to store up to 8 paired phone records.

- DSP full duplex technology
- Noise, echo and wind suppression
- Built-in rechargeable 600mAh Li-ion battery
- Sunvisor holder, USB cable and 12V car charger included



Specifications	AR-3134
Bluetooth version	V3.0+EDR
Bluetooth range of operation	0 to 10m
Hands-free talk range	0.5 to 2m
Talk time	6 to 10 hours
Charging time	3 hours
Input charging voltage	DC 5V (600mA)
Weight	60g
Dimensions	86(L) x 53(W) x 15(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3134	\$29.95	\$26.95	\$23.70

IN-CAR FM TRANSMITTER & CHARGER TO SUIT IPHONE 5®

A convenient way to playback music from your iPhone 5® Smartphone through your car's sound system. It features a Lightning™ connector to charge an iPhone 5® and a 3.5mm plug for audio streaming through the FM radio band. The transmitter also has a microphone built in so you can also enjoy handsfree conversations while driving. A handy USB port is featured on the back of the cigarette lighter plug for charging other phones, tablets and GPS devices.

Specifications	AR-3127
Range	5m
Frequency	88.1 - 107.9MHz
Power	5VDC
USB Output	5VDC 800mA
Stereo separation	40dB
Frequency response	20Hz-16000Hz
SNR	>= 45dB
Dimensions	100(L) x 30(W) x 12(D)mm



Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3127	\$29.95	\$26.90	\$23.70

IN-CAR FM TRANSMITTER FOR IPHONE®, IPOD® & IPAD® WITH CHARGER

Play music from your iPhone®, iPod® or iPad® through your car stereo while simultaneously charging the device. Simply connect the transmitter to your Apple device, select a frequency from 88.1 to 107.9MHz then tune in using your FM car radio. It also has a built-in mic for hands-free communication and a USB port built into the cigarette lighter plug for charging other popular electronic devices.

- Working voltage: 5VDC
- USB output voltage: 5VDC 800mA
- LCD display
- Built-in mic
- Apple® 30 pin connector
- Dimensions: 100(L) x 30(W) x 12(D)mm



Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3124	\$29.95	\$26.90	\$23.70

FM TRANSMITTER HANDSFREE KIT WITH BLUETOOTH TECHNOLOGY®

Plugs into the car's cigarette lighter for power and pairs with your Bluetooth enabled Smartphone for handsfree functionality. It also allows you to play music from your phone over the car stereo using the FM band of your stereo via A2DP Bluetooth or Aux input, or alternatively from a USB thumbdrive or microSD card. Features also include backlit LCD screen, adjustable volume and a USB output to charge your Smartphone (use your own charging lead that suits your phone).

- Built-in mic

Specifications	AR-3132
Power	12/24VDC
USB output	5V 1A
Aux input	3.5mm
Bluetooth class	V2.0
Frequency range	87.5 - 108MHz
Dimensions	87(L) x 39.39(W) x 19.5(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3132	\$44.95	\$40.45	\$35.90

SMARTPHONE HOLDER WITH FM TRANSMITTER

A universal Smartphone dash mount holder that doubles as an FM transmitter allowing playback of music through your radios FM frequency or for hands free conversations. Most Smartphones will comfortably dock in the cradle and can be charged with the supplied leads. A cigarette lighter plug is included that powers the FM transmitter at the base of the dock. It also has a USB port for connecting an array of charging cables. A microSD card slot is included which will let you playback MP3s, WMA or WAV files through the easy to use control interface. Comes with a 3M adhesive dash mounting disc for rough surfaces.

- iPhone® 3/4 charging
- USB MicroB charging cable
- microSD card slot 32GB max
- Suitable for iPhone®, Samsung®, Blackberry®, HTC®, LG®, Motorola®, Palm® and more

Specifications	AR-3128
Display	Digital
Format	MP3/WMA/WAV
Output interface	USB
Power	12-24V
USB output	5V/2.1A
Frequency	87.5-108MHz



Note: iPhone® not included

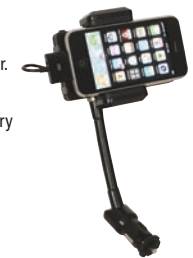
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3128	\$39.95	\$35.90	\$31.90

IN-CAR MP3/USB FM MODULATOR TRANSMITTER FOR IPHONE® & IPOD®

Play your iPhone® or iPod® through the FM radio in your car. Plug into the cigarette lighter socket, then tune to the FM band to play and charge your iPod®, iPhone® or use the 3.5mm stereo cable to play any other MP3 player or auxiliary audio source. It also has a USB socket, so you can also play tunes from a flash drive. The strong clamp is adjustable to take devices from 40 - 80mm wide.

Specifications	AR-3113
Range	5m
Frequency range	88 - 107MHz
Dimensions	110(H) x 65(W) x 40(D)mm

NEW LOW PRICE



Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3113	\$34.95	\$31.45	\$27.90

IN-CAR FM TRANSMITTER KIT - IN-LINE ANTENNA CONNECTION

A clever way to play music from your MP3 player, iPhone® or Smartphone through your car stereo with great audio quality. The system comprises of two parts; an FM modulator that fits inline with the car antenna for drift-free FM transmission, and the main unit that plugs into the car cigarette lighter socket and holds your device in the included universal holder. To operate simply connect the 3.5mm jack into the headphone socket on your device, choose from 3 FM frequencies, and tune to the frequency on your radio. To top it off there is also a USB socket to charge your device as you drive. A charging cable for iPhone® and 1m 3.5mm audio cable is included.

Specifications	AR-3104
Power input	12 - 24VDC
USB output	5VDC 2A Enough to charge iPad®
FM Freq	87.7MHz / 87.9MHz / 88.1MHz
Aux input	3.5mm jack
Cable length	1.5m



NEW LOW PRICE

↑	Cat.	Qty 1+
	AR-3104	\$19.95

FM TRANSMITTERS

FM TRANSMITTERS (CONTINUED)

IN-CAR FM TRANSMITTER/CHARGER

A necessary accessory to have for your iPhone 5® and iPod 5® in your vehicle. The bracket holds the device in place and charges the device through the Lightning™ connector. It has a built in FM transmitter that allows you to stream your conversation and music to your car's sound system for Hi-Fi reproduction. The unit connects to 12V power via the cigarette lighter socket and has a rigid gooseneck/swivel bracket to hold at the desired position



NEW LOW PRICE

- Range: 5m
- Frequency: 88-107MHz.
- Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3125	\$34.95	\$31.45	\$27.90

HANDS FREE MICROPHONES

STEREO HANDSFREE CAR KIT WITH BLUETOOTH® TECHNOLOGY

Plugs into the car's MP3/AUX 3.5mm jack for hands-free functionality with any Bluetooth enabled Smartphone. Features DSP echo cancellation technology, and A2DP to transmit the music from the phone through the car stereo via Bluetooth. Charge the built-in 100mAh rechargeable battery from the supplied car charger.



- Bluetooth class: V3.0
- Working time: 4 hours
- Dimensions: 54(L) x 17(Dia.)mm
- Charge time: 2 hours
- Standby time: 90 hours
- Power: 12/24VDC.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3130	\$39.95	\$35.90	\$31.90

PANEL MOUNT MICROPHONE WITH BLUETOOTH® TECHNOLOGY

Allows you to stream music from any Bluetooth enabled device over your car or marine radio. It also features a microphone so you can take phone calls hands free. It requires 12V power and connects to any head unit/stereo or car audio system that has an auxillary or line input. It will seamlessly switch between phone calls and music, and will remember paired devices and reconnect automatically.



- 12V powered
- Surface mount or flush mount (22mm cutout)
- 2 x 3.5mm sockets for speakers and microphone
- One knob design controls volume and track
- Bluetooth 4.0 (A2DP, AVRCP, HFP, HID)
- Bluetooth range 7m
- Dimensions: 75(L) x 60(W) x 39(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-3129	\$49.95	\$44.90	\$39.90

IN-CAR ACCESSORIES

SMARTPHONE AUDIO LEAD FOR CAR RADIOS

Connect it from your Smartphone to your car's 3.5mm Aux input socket to listen to music, then when you need to answer a call press the switch on the microphone to pause the music and switch to talk mode. Zero setup required, simply plug in. Features a highly sensitive microphone on a slim 3.5mm stereo audio lead.



NEW LOW PRICE

- Slim 3.5mm connectors
- Length: 120mm
- Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2097	\$7.95	\$6.95	\$6.25

GOOSENECK WINDSCREEN OR CIGARETTE LIGHTER UNIVERSAL MOUNT

Mounting your GPS/PDA/Mobile phone where it can obstruct your vision is very dangerous. With this handy dooberlacky, you can either plug into your cigarette lighter socket or mount it on the windscreen glass. The gooseneck allows it to be mounted where it won't obstruct your vision. The bracket adjusts to fit your device and can be rotated through 180° to accommodate wider devices, such as larger GPS units. The cigarette lighter mount has a piggyback socket so you can use the outlet to power your device.



- Base diameter: 67mm
- Gooseneck: 180mm long.
- Note: Mobile phone not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	HS-9002	\$29.95	\$26.90	\$23.70

GPS SUNSHADES

GPS SUNSHADES

An LCD on a GPS can become very hard to see in bright sunlight. Solve the problem easily by giving your GPS a sunhat. Simply clip to the top of your GPS unit. Different types to fit popular in-car GPS models: Garmin Nuvi, TomTom Go, Magellan Maestro, Navman etc.



NEW LOW PRICE

- Universal GPS Sunshade 3.5" Cat HS-9005
- GPS Sunshade for Garmin 4.3" Cat HS-9007

Note: GPS not included

↑	Cat.	Qty 1+
	3.5" Universal GPS Sunshade	HS-9005 \$2.95
	4.3" Sunshade for Garmin	HS-9007 \$2.95

GPS & PHONE CHARGER

UNIVERSAL GPS CHARGER WITH DUAL USB OUTPUT

This very handy universal GPS charger not only works as a replacement for an original GPS charger, but having two USB outputs and higher output power offers a bonus - allowing you to charge both your GPS and your mobile phone (or other USB device) at the same time!



With 2.1A available from each USB port, it has enough power for even the latest and greatest big screen GPS models, whilst still having enough power left over to charge a second USB device. Supplied with 1.2m USB charging lead and 6 replaceable connectors to suit most GPS models.

Specifications	MP-3676
Suitable for	TomTom, TomTom XL, Navman, Garmin, Magellan, Navigon, Falk, Mio, etc
Input	12-24VDC
Output	5VDC, 2.1A max per USB port (4.2A total)
Dimensions	100(L) x 42(W) x 25(H)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3676	\$29.95	\$26.90	\$23.70

IN-CAR QUICK CHARGER FOR IPHONE 5®, IPAD® ETC.

A handy in-car charger suitable for charging the latest Apple® brand gadgets such as iPhone 5® and iPad®, which have the new Lightning™ connector socket. With 2.1A of charge current available, this in-car charger is capable of charging your Apple® device at full speed, ensuring you get as much charge as possible on your commute.

- Input: 12-24VDC / Output: 5VDC 2.1A
- Lead length: 900mm with Lightning™ connector



- Compatible with
- iPhone 5®
 - iPhone 5s®
 - iPad mini®
 - iPad® (4th generation)
 - iPod Touch® (5th generation)
 - iPod Nano® (7th generation)

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MB-3668	\$14.95	\$13.35	\$11.70

IN-CAR QUICK CHARGER FOR SMARTPHONES & TABLETS (MICRO-B)

More and more non-Apple® brand Smartphones and Tablets are using the USB Micro-B socket for charging, and are also needing more current to charge at full speed. With 2.1A of charge current available, this in-car charger is your buddy in the glove box, ensuring you get a full charge into your Smartphone or Tablet on the drive to work. A saviour when you forget to charge overnight.



- Input: 12-24VDC
- Output: 5VDC 2.1A
- Lead length: 900mm with USB Micro-B connector

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MB-3669	\$14.95	\$13.35	\$11.70

CASSETTE ADAPTORS

CD/CASSETTE ADAPTOR

Play your portable CD or Mini Disc player through your car stereo cassette system.

- No power or batteries required.
- Supplied with 1.1 metre lead & 3.5mm stereo plug.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AR-1760	\$16.95	\$14.95	\$13.35

LED SPOTLIGHTS

600 LUMEN RECHARGEABLE LED SPOTLIGHT WITH ADJUSTABLE BEAM

An LED spotlight that's glove box friendly, but still bright enough to be properly considered a spotlight. With a bright 600 lumens of clean white light delivered by the Cree® XM-L LED, it can light up objects up to 500m away when adjusted to the tight spot beam. You can then adjust the beam to a wide, even flood beam when you need to light up a wide area. It is shock and vibration resistant, and of course weatherproof (IP65 rated) so you can use it in the rain. Nice and compact, light in the hand, and lasts for hours. Powered by 3 x 18650 Li-ion batteries, and includes mains and car chargers.

Specifications	ST-3316
Light output	600 lumens
Beam distance	up to 500m
Burn time	4 hours (high), 24 hours (low)
Battery	3 x 18650 Li-ion 2,200mAh included
Light modes	high (100%), low (20%)
Dimensions	170(L) x 91(H) x 55(W)mm
Weight	500g



NEW
2015



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
600	ST-3316	\$79.95	\$71.95	\$63.95

RECHARGEABLE LED SPOTLIGHTS WITH CREE® XML LEDS

These rechargeable spotlights with brand-new Cree® XML LEDs offers powerful lighting wherever required. Two models available; ST-3323 with 3 LEDs and ST-3325 with 6 LEDs. Lights feature three modes of functioning; high, low and strobe. Specially designed to meet portability, durability, and reliability. The body is made by high quality CNC aluminium, good heat sink, the torch head is made of stainless! Supplied with mains power adaptor.



NEW
2015



Specifications	ST-3323	ST-3325
LED type	3 x 10W Cree®	6 x 10W Cree®
Functioning modes	High, low and strobes	High, low and strobes
Lumens	1500	2500
Distance	350m	400m
Running time	3 hours	3 hours
Battery type	4 x 18650 Li-ion batteries (included)	3 x 26650 Li-ion batteries (included)
Dimensions	150(L) x 90(W) x 90(D)mm	150(L) x 90(W) x 90(D)mm
Weight	406g	552g

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
1,500	ST-3323	\$99.95	\$89.95	\$79.95
2,500	ST-3325	\$169.00	\$151.95	\$134.95

140 LUMEN SOLAR RECHARGEABLE LED SPOTLIGHT

This super bright 140 lumen solar rechargeable LED spotlight is perfect for your car, boat, workshop, camping or fishing trip. It has a dual position swivel handle for maximum versatility and a high tech solar panel which allows you to charge the battery when not near a 240V mains. Solar cell, car cigarette lighter and mains chargers are all included ensuring you have your spotlight charged at all times and being LED will provide countless of hours of operation without the need for replacement globes.

- Weatherproof
- Detachable weatherproof solar station
- 12V DC car cigarette lighter charger

Specifications	ST-3312
Light power	140 Lumens
Globe	3 Watt LED
Features	Swivel Handle
Dimensions	175 x 120 x 150mm



NEW
LOW PRICE



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
140	ST-3312	\$24.95	\$22.35	\$19.70

700 LUMEN WATERPROOF RECHARGEABLE SPOTLIGHT WITH CREE® XM-L2 LED

At the press of the trigger the powerful Cree® LED outputs up to 700 lumens of bright white light up to 440m! It is waterproof down to 1m and floats, which makes it ideal for boating, hiking, camping or roadside emergencies. Designed with a polycarbonate body with shock-absorbent rubber head for use with confidence in mind.

Features a built-in stand for hands-free operation, a carrying strap (included), and a safety lock to prevent unwanted on/off activation. Charge the built-in Li-Po rechargeable battery via Micro B USB.

Supplied with: Micro B USB

- XM-L2 Cree® white LED- up to 700 lumens
- Produces 440m beam throw
- 4 Lighting modes - high, medium, low, 2Hz flashing
- Safety lock prevents unwanted On/Off activation
- Built-in adjustable stand for hands-free operation
- Buoyant & submersible
- IP67 Waterproof & Dustproof



NEW
2015

Specifications	ST-3313
Battery	Built-in 3.7V 3000mAh Li-Po Rechargeable
Charging time	5hrs
Burn time	2.5 hours to 15 hours (depending on mode)
LED type	1 x XM-L2 Cree® White
Dimensions	160(H) x 146(L) x 75(Dia.)mm
Weight	406g

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
700	ST-3313	\$99.95	\$89.95	\$79.95



280 LUMEN 4 IN 1 CAMPING SPOTLIGHT

A versatile hand held rechargeable worklight for multiple applications around the campsite or backyard. It has a 280 lumen COB Cree XPG R5 main LED located on the front, which can be set to 280 lumens or 140 lumens for a longer burn time. One side has 12 x SMD2835 LEDs with bright and dim modes for ambient light, and the other side has 12 x SMD2835 LEDs, which produces a flashing red light for emergency situations.

Charge via its USB port using the supplied 80mm USB cable. Also this unit has a USB output socket, enabling you to charge a phone or other electronic device.

The worklight features an attached handle that can be rotated 180°, and can also be used hand free using the stand attached to the bottom.



NEW
2015

Specifications	ST-3343
Main light	
Type	1 x Cree XPG R5
Modes	high, low
Brightness	
High	280lm, runtime: 3 hours
Low	140lm, runtime: 6.5 hours
Side light	
LED type	12 x SMD2835 LED
Modes	high, low
Brightness	
High	80±10lm, runtime: 5-6 hours
Low	45±5lm, runtime: 24 hours
Side light flash	
LED type	12 x SMD2835 LED
Modes	flash
USB charge input	5V 1000mA
USB output	5VDC 1.5A
Battery type	Built-in 2 x LC18650 3.7V 2200mAh Li-ion batteries
Charging time	7.5 hours
Dimensions	190(L) x 100(D) x 90(W)mm
Weight	410g

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
280	ST-3343	\$49.95	\$44.90	\$39.90

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SURVIVAL KIT P272

HANDHELD SPOTLIGHTS & LANTERNS

HALOGEN SPOTLIGHTS

40,000 CANDLEPOWER 12V HANDHELD SPOTLIGHT

Simple, lightweight 12V 44W Halogen bulb. Comes with an adjustable handle and a 3m curly cord with cigarette lighter plug. It is water resistant and has an on/off switch.

- Dimensions: 171(H) x 195(L) x 120(W)mm



NEW
LOW
PRICE



↑ Candlepower	Cat.	Qty 1+
40,000	ST-3266	\$7.95

5,000,000 CANDLEPOWER RECHARGEABLE SPOTLIGHT WITH SWIVEL HANDLE

This powerful and compact hand-held spotlight provides 20 minutes continuous operation. It has an integrated multi-position rubber grip for a more comfortable grip and also has a dual LED complementary light. Comes with mains power adaptor and cigarette lighter charger.

- Swivel Handle & stand with hanging hole
- Bumper guard ring
- High polished reflector
- 6 volt H3 55W Halogen bulb



Specifications	ST-3303
Light power	5,000,000 Candlepower
Globe	6V H3 55W Halogen
Features	Swivel handle
Dimensions	260(L) x 175(W) x 180(H)mm

↑ Candlepower	Watts	Cat.	Qty 1+	Qty 5+	Qty 10+
Torch	5,000,000	ST-3303	\$34.95	\$31.45	\$27.90
↑		Cat.	Qty 1+	Qty 10+	Qty 25+
Replacement Globe		SL-3221	\$5.95	\$5.25	\$4.75

HID SPOTLIGHT

35W HIGH INTENSITY DISCHARGE (HID) SPOTLIGHT

Price Breakthrough! At last, a powerful HID hand-held spotlight for under \$100! This full-feature unit includes inbuilt rechargeable SLA battery, 240V AND 12V charger and swing away stand. It also includes a dual-led map light

- 35W HID bulb
- 30 million candlepower
- Amazing beam distance
- Reflector dia. massive 135mm
- Dimensions: 280(L) x 190(D) x 140(W)mm (less reflector)



* In Australia

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
35W HID	ST-3379	\$79.95	\$71.95	\$63.95
Spare Battery	ST-3397	\$24.95	\$22.35	\$19.70

SEARCH LIGHTS

3200 LUMEN HID SPOT/SEARCH LIGHT WITH REMOTE CONTROLLED PAN/TILT

At the touch of a button pan and tilt a powerful beam of light where you need it, without reaching/stepping outside your vehicle. Plugged into your cigarette lighter socket, it's capable of producing 3200 Lumens of white light reaching over 1000m, making it ideal for use in search and rescue missions, hunting or general spot lighting. You don't have to be stationary to use the light, the base features a magnetic base with rubber pad which ensures strong grip mounted on the roof of your car, 4WD, truck or boat. The remote will even allow you to operate the light up to 100m away; handy for searching on foot, tracking game or doing work around the campsite.

- Wireless remote control (100m range)
- On/off, 360° pan & 120° tilt range

Specifications	ST-3377
Power	HID-Xenon 35W
Voltage	12VDC
Colour temperature	6500K
Life	3000 hours
Light output	3200 lumens
Effective Range	1000m+
Base Design	Ferrite magnetic + rubber pad
Dimensions	270(H) x 200(L) x 180(W)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
3200	ST-3377	\$169.00	\$151.95	\$134.95

3,200 LUMEN LED SPOT/SEARCH LIGHT WITH REMOTE CONTROLLED PAN/TILT

At the touch of a button, pan and tilt a powerful beam of light where you need it, without reaching/stepping outside your vehicle. Plugged into your cigarette lighter socket, it's capable of producing 3,200 Lumens of white light reaching over 1000m, making it ideal for use in search and rescue missions, hunting or general spot lighting. You don't have to be stationary to use the light, the base features a magnetic base with rubber pad which ensures strong grip mounted on the roof of your car, 4WD, truck or boat. The remote will even allow you to operate the light up to 100m away; handy for searching on foot, tracking game or doing work around the campsite.

- Wireless remote control (100m range)
- On/off, 360° pan & 120° tilt range

Specifications	ST-3368
Power	50W
Voltage	12VDC
Colour temperature	6500K
LEDs	10 x 5W High Intensity XTE by Cree
Light output	3200 lumens
Effective Range	1000m+
Base Design	Ferrite magnetic + rubber vacuum pad
Dimensions	230(H) x 185(W) x 150(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
3,200	ST-3368	\$249.00	\$225.00	\$198.95

LANTERNS

150 LUMEN MINI LED LANTERN WITH MAGNET & HOOK

A versatile mini portable LED lantern which can sit flat on a table, mount to a metal surface with the built-in strong magnet, or hang using the nifty fold-out hook with clip. A push button in the base cycles the light through high, medium and low brightness, as well as slow or fast flash when used as a safety light. The frosted lens provides an evenly spread light. Perfect for garages, closets, camping, boating, fishing and so on.

- Light source: 3 high brightness LEDs
- Lumens: 150
- Power: Requires 3 x AAA batteries
- Dimensions: 65(Dia.) x 37(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
150	ST-3424	\$9.95	\$8.75	\$7.75

300 LUMEN LED LANTERN

This is a fantastic lantern for the serious camper. The first thing you notice is its solid and rugged construction, which is IPX4 rated so it can handle being left out in light rain. The illuminated push button switch cycles through 100%, 50% and 25% brightness, and holding the switch for two seconds toggles a red LED, perfect for night time use. One more press of the switch makes the red LED flash an SOS pattern if you are in trouble. Features non-slip carry handle, fold-out metal hang clip and non-slip rubber base and runs for up to 15 hours from 3 high capacity D cell batteries.

Specifications	ST-3422
LEDs	4 x Cool White LED + 1 x Red LED
Brightness	15,000 - 16,000mcd
Lumens	300 max
5 brightness modes	White - 100%, 50%, 25%, red - 100%, flashing
Battery	Requires 3 x D batteries - alkaline recommended
Waterproof	IPX4
Dimensions	180(H) x 95(Dia.)mm
Weight	560g



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
300	ST-3422	\$24.95	\$22.35	\$19.70

600 LUMEN LED LANTERN WITH CREE® XML LED

A super bright LED Lantern using the powerful Cree XML LED. Features a Cree blinding 600 lumens of cool white light with adjustable light intensity and flashing options. It is in a double moulded shock resistant case, perfect for a campsite, backyard or outdoor entertainment area.

- Cool White
- Weatherproof (IP44)
- Requires 6 x D batteries

Specifications	ST-3137
Multifunction	High / Medium / Flashing / Off
Burn time	Up to 30 hours (High)
Weight	780g
Dimensions	240(H) x 125(W) x 125(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
600	ST-3137	\$35.95	\$31.45	\$27.90

LANTERNS (CONTINUED)

600 LUMEN RECHARGEABLE LED LANTERN WITH POWERBANK

A super bright rechargeable LED Lantern that saves you from carrying costly replacement batteries. It features a powerful Cree® XML LED that produces a bright 600 lumens of cool white light with adjustable light intensity and a flashing option if you need to draw attention. It also has USB output to charge your portable devices without the need for mains power. It is in a double moulded shock resistant case, perfect for a campsite, backyard or outdoor entertainment area. Supplied with mains and car cigarette charger.



NEW
2015

Specifications	ST-3139
Colour Temperature	Cool White
Weatherproof IP Rating	IP44
Light Modes	Medium / High / Flashing / Off
Battery	Built-in 12,000mAh Li-ion
USB Output	5VDC, 1.0A max.
Burn time	Up to 7 Hours (High)
Dimensions	245(H) x 133(W) x 118(D)mm
Weight	978g



USB Port



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
600	ST-3139	\$99.95	\$89.95	\$79.95

LED HEAD TORCHES

40 LUMEN 12 LED HEAD TORCH

A straight forward head torch without all the 'bells and whistles'. The unit has a total of 12 LEDs which can be switched to various intensities: 4 LEDs, 8 LEDs, 12 LEDs or strobing. It is light, compact, very efficient on batteries and comes with a fully adjustable head strap.

- Requires 3 x AAA batteries (not included)



Specifications	ST-3286
Light Output (lumens)	40
Burn time	15-20 hrs
Light modes	Low, medium, high, flashing
Water resistant	No
Batteries	3 x AAA (not included)

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
40	ST-3286	\$9.95	\$8.75	\$7.75

160 LUMEN CAP MOUNT TORCH WITH CREE® LED

This super bright head torch clips onto your hat or cap, which frees up your hands to take on other tasks whilst providing you with light. Use the high intensity adjustable light beam to direct the light and focus with either a spot light or flood beam.



Cap not included

Specifications	ST-3291
Burn time	4 hours
Bulb type	Cree® 3W
Output	160 lumen
Water resistant	No
Batteries	3 x AAA (not included)
Dimensions	93(L) x 55(W) x 25(Dia)mm

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
160	ST-3291	\$12.95	\$11.35	\$10.35

180 LUMEN ADJUSTABLE HEAD TORCH WITH CREE® LED

Cree® LEDs are the last word in illumination and 3W of power will really light up your world. Three modes of operation - high, low and strobe. The beam can be focused quickly from wide to spot by simply sliding the zoom in or out. Comfortable elasticised head strap. Camping, caving, fishing etc.



CREE®
LEDs



Specifications	ST-3279
Light Output (lumens)	180/80 lumens
Burn time	8hrs
Light modes	High, low, strobe
Water resistant	Yes
Batteries	3 x AAA (not included)
Weight	105g with batteries

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
180	ST-3279	\$19.95	\$17.95	\$15.70

550 LUMEN HEAD TORCHES WITH ADJUSTABLE BEAM & CREE® XML LED

CREE®
LEDs

Light up the way when hiking, camping, caving, or when working on your car or boat. Will output 550 lumens of bright white light which is more than enough for all of the above and more. The headstrap is adjustable and the light beam can be adjusted to suit your needs. To operate simply press the push switch on the battery pack mounted on the back of the head strap.

- Dimensions: 80(W) x 70(H) x 55(D)mm

Two models available

550 LUMEN HEAD TORCHES WITH ADJUSTABLE BEAM AND CREE® XML LED

Specifications	ST-3298
Battery	Requires 4 x AA batteries
Lumens	550
Burn time	4 - 5 hours
Light Modes	High, dim, flashing

ST-3298

RECHARGEABLE 550 LUMEN HEAD TORCHES WITH ADJUSTABLE BEAM AND CREE® XML LED

- Rechargeable 18650 Li-ion battery, charger and mains power supply are included

Specifications	ST-3299
Light Modes	High, dim, flashing
Lumens	550
Burn time	4 - 5 hours
Recharge time	4 hours

ST-3299

↑ Lumens		Cat.	Qty 1+	Qty 10+	Qty 25+
550	Takes 4 x AA Batteries	ST-3298	\$29.95	\$26.95	\$23.70
550	Rechargeable	ST-3299	\$49.95	\$44.90	\$39.90



1,200 LUMEN RECHARGEABLE HEAD & BIKE TORCH KIT

CREE®
LEDs

Providing up to 1,200 lumens of intense white light, this head torch is the ideal safety addition for any cyclist. Not only limited to cycling, it's also excellent for caving, mountain climbing, camping, mining etc. It connects to a Li-ion battery pack which will provide up to 20 hours of use with the light at 40% brightness. The 3 x Cree® XML LEDs life expectancy is over 100,000 hours and is water resistant, ensuring that it will outlast the elements.

- Comes with 2 (small and large) flexible rubber mounts for securely attaching the torch to your bike handlebars.
- Mains charger included.



Specifications	ST-3467
Light modes	High, medium, low, flashing
Mount	Handlebars, Headstrap
Water resistant	Yes
Lumens	1200
LED Life	100,000 hours
Burn time	20hrs on low brightness
Recharge Time	3.5 Hours
Weight	225g
Dimensions	54(L)mm x 42(Dia.)mm

↑ Lumens	Cat.	Qty 1+	Qty 10+	Qty 20+
1,200	ST-3467	\$89.95	\$80.95	\$71.95

STORE DETAILS

For store locations and opening hours see the back cover of this catalogue or download our "Store Locator App".



HANDHELD LED TORCHES

KEYRING TORCHES

MINI KEYRING LED

Convenient little LED torch to attach to your set of keys. Great for finding a keyhole in the darkness. Includes 2 bright white LEDs.

- Includes 1 x CR1620 battery
- Dimensions: 50(L) x 27(W) x 9(H)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Keyring Torch	ST-3381	\$3.95	\$3.45	\$3.15

LASER POINTER KEYRING

This laser keyring pointer is chrome plated, and has a key chain attached.

- Uses 3 x LR44 batteries included.
- Size, only 70mm long x 13mm dia.
- Wavelength 650nm
- Max output < 1mW



This laser pointer has passed Australian Standards for laser pointers. AS/NZS 2211.1:1997.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Laser Pointer	ST-3102	\$14.95	\$13.35	\$11.70

LED TORCHES

90 LUMEN PEN LIGHT WITH COB LED

A nifty little pen LED light with pocket clip so you can have it illuminate in front of you while keeping both hands free. The COB (chip-on-board) LED provides a wide spread cool white light and runs up to 20 hours using 3 x AAA batteries. Available in yellow and orange colours.



Specifications	ST-3466
Requires	3 x AAA batteries
Burn time	Up to 20 hours (using Alkaline)
Lumens	90
Dimensions	165(L) x 30(D) x 16(W)mm

Product available in yellow and orange

NEW LOW PRICE

↑	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	90	ST-3466	\$9.95	\$8.75	\$7.75

170 LUMEN TORCH WITH ADJUSTABLE BEAM & CREE® XPE LED

Extremely bright and efficient torch for its size. Features a robust machined aluminium body, pull-zoom adjustable beam, and O-ring seal for dust and water resistance.

- Includes wrist strap and requires just 1 x AA battery.



CREE® LEDs

Specifications	ST-3483
Output	170 lumens
Burn Time	Up to 4 Hours
Colour Temperature	Cool white
Batteries	Requires 1x AA Battery
Dimensions	119(L) x 33(Dia.)mm

1 YEAR WARRANTY

↑	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	170 Adjustable	ST-3483	\$9.95	\$8.75	\$7.75

TORCHES WITH CREE® LED

CREE® LEDs

Cree® LED powered torches have made a name for themselves as being able to produce powerful white light without the excessive power consumption. The revolutionary design of Cree® LEDs gives torch enthusiasts great versatility. They will start in sub-zero temperatures and last for thousands of hours.

This range of Cree® LED torches are all encased in rugged aircraft-grade aluminium that will withstand the rigours of constant use. Tactile switches are standard allowing for momentary on lighting, perfect for signalling across distances in poor light or for quickly checking a map.

90 LUMEN POWERED TORCH WITH CREE® LED

- Splash Resistant

Cat ST-3452



CREE® LEDs

190 LUMEN TORCH WITH ADJUSTABLE LENS WITH CREE® LED

- 190 lumens
- Tactical switch
- Multiple light modes
- Adjustable beam

Cat ST-3456



CREE® LEDs

480 LUMEN 5W TORCH WITH CREE® LED

- Cree® XM-L T6 LED produces a impressive 480 lumens
- IP65 weatherproof rating
- Aircraft-grade aluminium
- Adjust beam light up to 200 metres away.
- Weight 107g without battery

Cat ST-3475



CREE® LEDs

1 YEAR WARRANTY

NEW LOW PRICE

Specifications	ST-3452	ST-3456	ST-3475
Light Output (Lumens)	90	190	480
Burn Time	1 hour	2.4 hours	4h/high, 8h/medium, 24h/low
Dimensions	95(L) x 20.5(Dia.)mm	105(L) x 34(Dia.)mm	118(L) x 37(Dia.)mm
Battery (required)	1 x AA Battery	3 x AAA, batteries	3 x AAA batteries (not included)
Light modes	Max, medium, low, SOS, Blinking	Max, medium, low, SOS, Blinking	5W, 2.5W, 0.5W, SOS, Strobe
Accessories	Carrying Strap	Carrying Strap	Carrying Strap

↑	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	90	ST-3452	\$9.95	\$8.75	\$7.75
	190 Adjustable	ST-3456	\$19.95	\$17.70	\$15.70
	480 Adjustable	ST-3475	\$34.95	\$31.45	\$27.90

BATTERIES

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BATTERIES

P323

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P327

FROM \$19.95
MB-3564



CHARGERS

P329

FROM \$19.95
SB-2403



LI-ION BATTERIES

P328

LED TORCHES (CONTINUED)

370 LUMEN USB RECHARGEABLE LED TORCH WITH ADJUSTABLE BEAM

A great little LED torch with 370 lumens of bright white light, and a slide adjustable beam to go from a wide flood beam to a narrow spot beam. Features a 2,200mAh lithium ion 18650 rechargeable battery, which you can recharge inside the torch by plugging into any USB port. Charge it off your computer or the charger from your mobile phone - USB charging is literally everywhere! Add to that the tactical style tail cap switch, multiple operating modes (100%, 50%, and SOS) and it's a winner.



NEW
2015

Specifications	ST-3490
Light output	370 lumens
Burn time	4 hours (at 100%)
Battery	1x 18650 Li-ion 2200mAh included
Light modes	high, low, SOS
Dimensions	150(L) x 37(Dia.)mm

1
YEAR WARRANTY

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
370 Adjustable	ST-3490	\$29.95	\$26.95	\$23.70

700 LUMEN RECHARGEABLE TORCH WITH ADJUSTABLE BEAM & CREE® XML LED

CREE
LEDs

High powered 700 lumen torch with a fully adjustable beam spread. The thick convex lens creates a sharp, perfectly circular projection. The lens is designed in such a way as to create two concentric circles where the outer circle of light is brighter than the inner. Pull the grip at the end of the torch out to focus the beam on an object up to 200m away or push it in for a wide beam to light up your immediate vicinity. Extrusions down the shaft of the torch make for a solid grip. Finished in black with a tactical switch for mode adjustment. Battery, charger and mains power supply are included.



Specifications	ST-3485
Output	700 lumens
Battery	1 x 18650 Li-ion battery included
Burn time	Up to 3 hours
Light modes	High, medium, low, strobe, SOS
LED Life	100,000 Hours
Dimensions	128(L) x 38(Dia.)mm

1
YEAR WARRANTY

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
700 Adjustable	ST-3485	\$54.95	\$49.45	\$43.90

1,000 LUMENS RECHARGEABLE DIVING TORCH WITH CREE® XML

A super bright torch for your next underwater expedition. Features a tough aircraft-grade aluminium housing fully sealed with multiple o-rings to prevent any water from entering the device. Twist the base to switch between high, medium, low, strobe, and SOS light modes. The twist switch base also prevents accidental engagement and features a hole for attaching to string or wire. Great for scuba diving near old shipwrecks, coral reefs, shell fishing, or underwater covert operations.

Specifications	ST-3489
Lumens	1000
Rating	IPX8
Waterproof	Suitable up to 20m
Burn time	1.5 hrs on high / 3 hrs medium / 6 hrs on low
Charge time	5 hrs
Includes	2 x 18650 Batteries
Dimensions	205(H) x 46(Dia.)mm



1
YEAR WARRANTY

• Battery, charger and power adaptor included.

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+	
1,000	Rechargeable Waterproof	ST-3489	\$109.00	\$89.95	\$79.95

750 & 1500 LUMEN CREE® XM-L RECHARGEABLE TORCHES

Tough, military grade torches featuring the CREE® XM-L LED for superior light efficiency and brightness. This LED boasts a 20% efficiency improvement over CREE® XP-G LEDs. The build quality is superb with comfortable grip indentations throughout the body and both models are o-ring sealed to protect against water, dust, and grime. The aluminium alloy reflector creates a smooth optimised beam. They come with 2 x rechargeable Li-ion batteries each which can be recharged from the supplied mains charger.

750 LUMEN CREE® XM-L RECHARGEABLE TORCH ST-3482

Specifications	ST-3482
Burn time	3 hours
Includes	2 x Li-ion 18650 2200mAh 3.7V rechargeable batteries
Light modes	High, medium, low, flashing, SOS
Accessories	Carrying strap
Dimensions	230(L) x 55(Dia.)mm



1500 LUMEN 3 X CREE® XM-L RECHARGEABLE TORCH ST-3484

• 3 x CREE XM-L LEDs which punch out a massive 1500 Lumen output.

Specifications	ST-3484
Burn time	2 hours
Includes	2 x Li-ion 18650 2200mAh 3.7V rechargeable batteries
Light modes	High, medium, low, flashing, SOS
Accessories	Carrying strap
Dimensions	220(L) x 55(Dia.)mm



1
YEAR WARRANTY

↑ Lumens		Cat.	Qty 1 +	Qty 5 +	Qty 10 +
750	Rechargeable	ST-3482	\$64.95	\$58.50	\$51.95
1,500	Rechargeable	ST-3484	\$135.00	\$115.95	\$102.95

SPECIALTY LED TORCHES

6 X OLSON OSRAM LED TORCH

High brightness torch featuring 6 x ultra bright warm white Olson Osram LEDs. Great addition to your fishing tackle box or keep one in the car for emergency situations. Bright yellow plastic so it doesn't go missing.



- Requires 4 x AA batteries
- Dimensions: 190(L) x 60(Dia.)mm

↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
300	ST-3486	\$19.95	\$17.70	\$15.70

MONTHLY SPECIALS

Look out for our monthly promotions in store now!

SUPER BRIGHT LED TORCH WITH MAGNETIC HEAD & TELESCOPIC NECK

A pen-sized torch with super bright LEDs and magnetic head for picking up objects. The torch head is attached to a telescopic mast hidden away inside the casing. Fully extended the torch has a total length of 546mm allowing your search into cracks and crevices. A gooseneck at the end allows you to shine light around corners and pick up metallic objects out of reach.

- Requires 4 x LR44 batteries (included)
- Dimensions: 165(L)mm to 550mm (neck fully extended); 20mm torch head diameter)



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+	
50	Telescopic	ST-3463	\$12.95	\$11.35	\$10.35

GREEN POWERED TORCHES

3 LED TORCH WITH AM/FM RADIO & DYNAMO CHARGER

A handy rechargeable torch to keep in the glove box for emergencies or to take on a camping trip. Features 3 bright white LEDs, an AM/FM radio, as well as a personal alarm to attract attention. It's also lined with a strip of luminescent material so will glow in the dark. Charge by turning the dynamo handle or with a micro-B USB cable. No need to worry about batteries. The micro-B USB port doubles as a way to charge the torch and to charge external devices such as Smartphones. The radio station frequency is displayed on a red digital display.

- Internal rechargeable Li-Po battery
- Included adaptors: 1 x USB MicroB, 1 x USB MiniB, 1 x Nokia Plug
- Dimensions: 136(L) x 48(W) x 34(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Dynamo	ST-3357	\$29.95	\$26.90	\$23.70

MULTI-FUNCTION DYNAMO TORCH WITH IGNITER

The ideal accessory for camping, hiking and emergency situations. It's a torch, mobile phone charger, compass, whistle, and a windproof igniter for starting camp fires. Includes carabiner to attach to your bag or gear and doesn't need batteries - simply crank the dynamo handle to generate power.

- Dimensions: 105(L) x 52(W) x 34(H)mm



⬆	Cat.	Qty 1 +	Qty 3 +	Qty 6 +	
	Dynamo	ST-3341	\$14.95	\$13.35	\$11.70

3W LED TORCH WITH SOLAR RECHARGING COMPARTMENT

A powerful 3W Nichia LED torch that can be charged from the solar compartment. For camping and long trips away from mains power the ability to solar charge your torch is very handy. The torch slides into the compartment and is then sealed with a screw on lid. Leave the compartment on the dashboard of your car to recharge its battery then slide the torch out when ready to use. The charging compartment has test and charge LED indicators.



Specifications	ST-3469
Power	3W
LED	Nichia (Japanese made)
Batteries	1 x 3.2V 1200mAh Li-ion rechargeable battery (included)
Lumens	150
Burn time	2.5 hours
Water resistant	Yes
Recharge time	8 hours
Solar panel type	Amorphous
Torch dimensions	166(L) x 34(Dia)mm
Solar compartment dimensions	198(L) x 55(H) x 95(D)mm

↑	Lumens	Cat.	Qty 1+	
	150	Solar	ST-3469	\$19.95

LED TORCH/RADIO/USB CHARGER DYNAMO WITH BUILT-IN SOLAR PANEL



A handy emergency LED torch/radio/mobile phone charger, suitable for camping or general outdoor use. Charge the internal battery using a USB power source; built-in solar panel; or hand crank dynamo. Tune into emergency broadcasts or regular radio stations by adjusting the telescopic antenna and the tuning dial; the radio supports AM/FM and three Short Wave frequencies.

- Dimensions: 135(L) x 64(W) x 40(D)mm

⬆	Cat.	Qty 1+	Qty 4+	Qty 10+	
	Dynamo/Solar	ST-3358	\$44.95	\$40.45	\$35.90

DYNAMO MULTIFUNCTION TORCH/MUSIC PLAYER/RADIO/PHONE CHARGER

Perfect gadget for your next camping, road trip, and other outdoor activities. Crank the dynamo handle for power and you have a torch, music player, AM/FM radio and Smartphone charger! It also features 4 red LEDs that act as a beacon and a siren in case of emergency. You can also plug in a USB flash drive or SD card for playing back your selection of MP3s. Navigate through your playlist with the top buttons. The unit features an internal rechargeable 1000mAh battery that can be charged by cranking the handle or from a mains charger (not included). For further power redundancy it also accommodates 4 x AA batteries.

- Built-in 1000mAh 3.7V Li-Po battery
- 3.5mm socket for headphones
- 3.5mm socket for output
- Can take 4 x AA batteries for further power redundancy
- High brightness 4 x LED flashlight
- High brightness 4 x RED led emergency beacon
- Includes 3.5mm to USB cable
- Charging time: 5 hours from mains adaptor (mains charger not included, requires 5VDC 500mA charger)
- Included adaptors to suit USB cable
- 1 x USB Micro B
- 1 x USB Mini B
- 2 x Nokia Plugs
- Dimensions: 190(L) x 125(W) x 90(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Dynamo	ST-3356	\$59.95	\$53.95	\$47.90

BIKE, CYCLE & SAFETY LIGHTS

SUPER HIGH BRIGHTNESS LED BIKE SAFETY LIGHT

Mount this light on your bicycle to be seen and to be safe. This light features 10 LEDs in two rows of 5. Each row of LEDs can be controlled individually. Row light modes include steady on, flashing, and fast/slow light oscillation. Or alternated, so one row can be steady on while the other row is flashing or any combination of the functions. It also includes an internal reflector which helps intensify the brightness of the LEDs.

- Requires 2 x AA batteries
- Dimensions: 95(L) x 85(W) x 40(H)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Bike Safety	ST-3083	\$9.95	\$8.75	\$7.75

FLEXIBLE LED SAFETY LIGHTS - PAIR

A pair of handy press-down LEDs that have two modes of operation, blinking and constant on. A great little accessory to enhance your personal safety while riding a bike at night. Each LED is encased in flexible silicone that can be wrapped around bicycle handlebars or a helmet strap.

- Each unit includes 1 x CR2032 battery
- Dimensions: 75(L) x 29(W) x 29(H)mm



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Pair	ST-3136	\$9.95	\$8.75	\$7.75

RECHARGEABLE BIKE AIR HORN

For when the bike bell isn't loud enough. This Canadian-made product can be recharged with the nifty air pump supplied. (It can also pump-up push bike tyres.)

You pump up the air reservoir (which looks like a PET bottle but is much stronger) and you then have a VERY loud 120dB! horn warning/alerting device. Each recharge lasts about 50 short blasts.

- Volume control switch
- Handle bar mount (24 - 31mm)
- 800mm hose length
- Weighs under 100g



⬆	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Bike Air Horn	GH-1113	\$49.95	\$44.90	\$39.90

12/24VDC CABIN/CARAVAN LIGHTING

MINI LED LIGHT

Pre wired in a sleek and compact design, this is a perfect mini LED light for illuminating harsh areas. Using new advanced lens technology the LEDs increase light output for optimal lighting with minimal power. The 12 volt light draws 10% of the power of conventional lights. Sealed stainless steel construction allow for placement in tight spaces and harsh environments. Horizontal and vertical mounts provide a variety of mounting options. Can be used in step, board, accent lighting as well as marine applications!

- White powdercoated finish
- 12VDC
- Dimensions: 39(W) x 12.7(H) x 12.7(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+
24	ST-3193	\$14.95	\$13.35	\$11.70

"HOCKEY PUCK" STYLE DOWNLIGHT

This unit features 4 super-bright cool white LED's in a diffuser fitting. The diffuser also acts as a push-on-push-off switch. The lamp can be a surface mount (hockey puck style) or flush mount style - by creating a 55mm ceiling hole. Either way 3 x stainless steel screws are provided.

- Draws a miniscule current
- Modern, classic design
- 12VDC powered
- Dimensions: 75mm (Dia.) x 25(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
45	SL-3458	\$14.95	\$13.35	\$11.70

LED PUCK LIGHT WITH PIR

Easy to install LED Puck Light with PIR and sound sensors to illuminate a dark area when movement or sound is detected. It mounts using its attached hook or magnetic base, and is powered by 2 x AA batteries so no wiring is required. Ideal to brighten up hallways, stairways, cupboards, garage, etc.

- LED type: 12 x SMD LEDs
- PIR sensor distance: 5m
- Lumens: 100
- Battery: Requires 3 x AA batteries
- Dimensions: 120(Dia.) x 24(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
100	SL-3504	\$14.95	\$13.45	\$11.95

WINDOW MOUNT SOLAR RECHARGEABLE LED PUCK LIGHT

Designed to suction cup mount onto a window so that the rear mounting solar panel charges the internal battery during the day. Turn on the 3 x built-in bright white LEDs by simply pressing the front lens, press again to turn off.

- Solar rechargeable
- Easy one-touch ON/OFF operation
- Battery type: Built-in Ni-MH
- LED colour: Cool white
- Dimensions: 72(Dia.) x 23(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
10	SL-3500	\$9.95	\$8.75	\$7.75

REMOTE CONTROLLED LED PUCK LIGHT KIT WITH 3 LIGHTS

This set of 3 puck lights are remote controlled so you can illuminate an area without the need to find the light in the dark to turn it on. Also good for areas where the light is out of reach. Each light has 6 x 2835 SMD cool white LEDs produce a total of 35 lumens. They can be used in kitchens, on shelving, in closets or even in the workshop - Virtually anywhere! The supplied remote control has four buttons - ON / OFF / 30min timer / 50% Brightness.

NEW 2015

Specifications	SL-3502
LED type	2835 SMD
Lumens	35 each
Remote control distance	10 metres
Battery	Each light requires 3 x AAA batteries
Dimensions:	104(L) x 72(W) x 29(D)mm

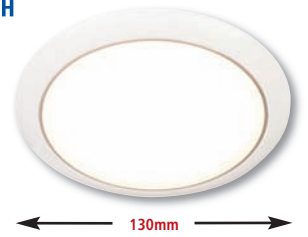


↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
35 x 3	SL-3502	\$29.95	\$26.95	\$23.70

ULTRA-SLIM 42 LED CARAVAN ROOF LIGHT WITH TOUCH SWITCH

Mount to the roof of a caravan, RV or boat to produce bright white light from its 42 cool white LEDs. It is only 11mm thick, features a touch switch for lighting control and is easy to install.

Specifications	SL-3449
Voltage	12-24VDC
LED	42
Lumens	107
Beam Pattern	120°
Colour Temp.	Warm White
IP Rating	IP66
Power Consumption	3W
Dimensions	130(Dia.) x 11(H)mm

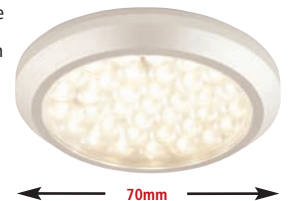


↑ Lumens	Colour	Cat.	Qty 1+	Qty 5+	Qty 10+
107	Warm White	SL-3449	\$34.95	\$31.45	\$27.90

CIRCULAR 36 LED - 190 LUMEN CABINET LIGHT - TOUCH SWITCH

A stylish and compact LED Cabinet Light suitable for caravan, marine, 4WD, auto and domestic applications. Touch the aluminium casing to turn the light on and off. Screw mounting holes in base hidden behind removable aluminium trim for neat and easy installation.

Specifications	ST-3915
Input voltage	9 - 30VDC (works on 12V and 24V systems)
Uses	36pcs of 3528 SMD LEDs
Lumens	190
light Output	90°
Power Consumption	3W
Colour Temperature	Cool white 5500K
Dimensions	70(Dia) x 9(H)mm



↑ Lumens	Colour	Cat.	Qty 1+	Qty 3+	Qty 6+
190	Cool White	ST-3915	\$34.95	\$31.45	\$27.90

LET'S FIND EVERYTHING YOU NEED!

12VDC TOUCH SWITCH CONTROLLER WITH 3 X TOUCH SWITCHES

Add three sleek and unobtrusive touch switches to control 12VDC LED lighting in your caravan, car, or boat. Just connect a 12VDC power supply or wire in power yourself. Each switch will control the same device so you can install the switches in convenient locations.

Specifications	
Rated Current	3A
Standby Power	6W
Rated Power	550W
Dimensions	59(L) x 39(W) x 13(H)mm
Touch switch wire length	150(L)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ST-3942	\$29.95	\$26.90	\$23.70

12VDC SWITCH CONTROLLER WITH PIR SENSOR

Add some power automation to your caravan or boat. This simple device to switch on lights or other 12VDC powered devices when movement is detected. Able to be connected to a 12VDC power supply or you can wire in power yourself if you need a more customised install.

Specifications	
Max switching load	12VDC 3A
Detection Range	1-3m
Switch on time	30 seconds
PIR Wire Length	150(L)mm
Dimensions	59(L) x 39(W) x 18(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	ST-3940	\$21.95	\$19.70	\$17.35

LED CABIN LIGHTING

12/24VDC CABIN/CARAVAN LIGHTING (CONTINUED)

WATERPROOF CEILING MOUNT LED LIGHT

Improve the illumination in your caravan, car, truck or boat with this ceiling mount LED light. Waterproof and easy to install, the 42 high brightness LED's add more than enough light for your interior.

Specifications	SL-3448
LED	42
Output	4.2W
IP rating	IP66
Power	12-24VDC
Dimensions	145(Dia.) x 28(H)mm

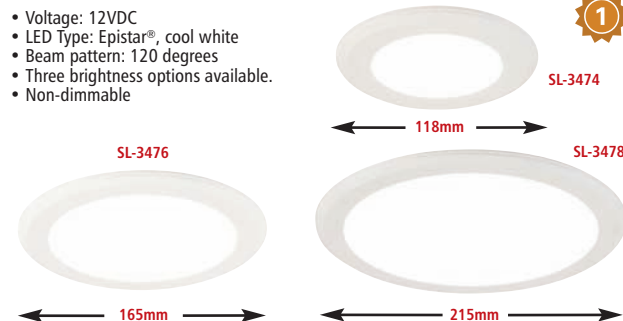


↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
200	SL-3448	\$39.95	\$35.90	\$31.90

ULTRA-SLIM LED PANEL CABIN ROOF LIGHTS

These stylish lights are just 7mm thick. Mount them to the roof of your caravan, RV or boat for a bright, cool white light around the cabin. The side-lit LED panel design produces an evenly spread light. They are easy to install and mounting hardware is included.

- Voltage: 12VDC
- LED Type: Epistar®, cool white
- Beam pattern: 120 degrees
- Three brightness options available.
- Non-dimmable



Specifications	SL-3474	SL-3476	SL-3478
Lumens	350	590	680
Power consumption	6W(500mA)	8W(660mA)	10W(830mA)
Dimensions	118(Dia.) x 7(D)mm	165(Dia.) x 7(D)mm	215(Dia.) x 7(D)mm

↑ Lumens	Dia.	Cat.	Qty 1+	Qty 5+	Qty 10+
350	120mm	SL-3474	\$34.95	\$31.45	\$27.90
590	165mm	SL-3476	\$44.95	\$40.45	\$35.90
680	215mm	SL-3478	\$54.95	\$49.45	\$43.90

SOLID HIGH POWER IP67 LED CEILING/DECK LIGHT

This LED light is probably the toughest and brightest we've discovered in our search for the best in LED lighting. Made with powder coated die cast aluminium alloy, fitted with ten 3W Epistar LEDs sealed in resin, and using high quality American brand driver circuitry with pulse width modulation, this light is perfectly suited to marine environments or any other outdoor location totally exposed to the elements.

- Install can be either as a surface mount using the supplied mounting ring and gasket, or flush mount requiring just 10mm of mounting depth.

Specifications	SL-3480
Input voltage	9-36VDC
Power	30W
Lumens	1600 lumen
Beam type	flood (120° angle)
LED type	10x Epistar 3W
Operating temp	-30°C to 50°C
Dimensions	217(Dia.) x 16(H)mm



↑ Lumens	Colour	Cat.	Qty 1+	Qty 5+	Qty 10+
1600	Cool White	SL-3480	\$119.00	\$106.95	\$94.95

12 WHITE LED ROOF MOUNT INTERIOR LAMP

Simple to install and use LED roof lamp for your motorhome, truck, or boat.

- 12 high brightness cool white LEDs and a on/off switch.
- Wire it up and away you go.

Specifications	SL-3452
Power	12V
Colour	Cool White
LED	12 x LED
Light Output	140 Lumens
Dimensions	185(L) x 126(W) x 25(H)mm



↑ Lumens	Colour	Cat.	Qty 1+	Qty 5+	Qty 10+
140	Cool White	SL-3452	\$29.95	\$26.90	\$23.70

6 X WHITE LED AWNING LIGHT

A simple to install light to provide illumination under a caravan or boat awning.

- Features two mounting holes on either edge and should be wired up to an on/off switch.

Specifications	SL-3459
Input voltage	12 - 24VDC
LED	6 x Cool white LED
Light output	140 Lumens
Dimensions	250(L) x 85(W) x 35(H)mm



↑ Lumens	Colour	Cat.	Qty 1+	Qty 5+	Qty 10+
140	Cool White	SL-3459	\$24.95	\$22.35	\$19.70

WHITE LED CORNER STRIP LAMPS

Corner strip lamps for a caravan or boat. The high brightness LEDs are encased in an opaque diffusing channel and include mounting holes on either end. Wire it up to a switch and away you go.

We have 6 x LED and 12 x LED models available.

6 X WHITE LED LAMP

SL-3463

12 X WHITE LED LAMP

SL-3465

Specifications	SL-3463	SL-3465
Power	12VDC	12VDC
Colour	Cool white	Cool white
LEDs	6 x LEDs	12 x LEDs
Light output	65 Lumens	140 Lumens
Dimensions	210(L) x 25(W) x 25(D)mm	410(L) x 25(H) x 25(D)mm

↑ Lumens	Colour	Cat.	Qty 1+	Qty 5+	Qty 10+
65	Cool White	SL-3463	\$14.95	\$13.35	\$11.70
140	Cool White	SL-3465	\$24.95	\$22.35	\$19.70

ROOF LAMPS WITH SWITCH

A fixed installation roof lamp suitable for a caravan, boat, truck, or even a car. The LEDs sit behind a diffuser to help spread the light evenly. Mounting holes on the backing will allow attachment to the roof.

12 LED Cat. SL-3460

30 LED Cat. SL-3461

Dual light intensity feature.



Specifications	SL-3460	SL-3461
Power	12/24VDC	12/24VDC
Colour	Cool white	Cool white
LED	12 x LEDs	30 x LEDs
Light output	280 Lumens	320 Lumens
Dimensions	404(L) x 88(W) x 28(H)mm	398(L) x 108(W) x 31(H)mm

↑ Lumens	Colour	Cat.	Qty 1+	Qty 5+	Qty 10+
280	Cool White	SL-3460	\$49.95	\$44.90	\$39.90
320	Cool White	SL-3461	\$79.95	\$71.95	\$63.95

WATERPROOF LEDS WITH 4.5M CABLE

A pair of robust LED spotlights with a pre-attached 4.5m power cable. They're both waterproof so are ideal for installation in the garden to light up walkways, water features, or general garden ambience. They require a 12VDC power source so could also be adapted to automotive applications such as caravan lighting. Both models feature a threaded copper with chromium plated casing allowing them to be installed flush with a wall or footpath (may require the use of a hole saw).

Specifications	SL-2747	SL-2749
Power consumption	1W	3W
LED(s)	1	1
Power per LED	1W	3W
Brightness	85 lumens	150 lumens
Colour	3300K	3300K
Input voltage	12VAC	12VAC
Lens angle	45°	120°
Dimensions	37(Dia) x 41(D)mm	50(Dia) x 38(H)mm
Cable length	4.5m	4.5m
Rated	IP68	IP68



↑ Each	Cat.	Qty 1+	Qty 5+	Qty 10+
1W	SL-2747	\$19.95	\$17.70	\$15.70
3W	SL-2749	\$17.95		

12/24VDC CABIN/CARAVAN LIGHTING (CONTINUED)

3W GYMBAL LED SPOTLIGHT FLUSH MOUNT

A flush mount LED spotlight suitable for caravans and boats. It produces a bright cool-white light in a gymbal mount/bracket for optimum directivity. An on/off rocker switch fitted. Negligible current draw.

Specifications	SL-3472
LED	1 x 3W LED
Output	165 Lumens
IP rating	IP66
Power	12-24VDC
Requires 52 Dia. Cut-out	



↑ Lumens	Colour	Cat.	Qty 1+	Qty 5+	Qty 10+
165	Cool White	SL-3472	\$29.95	\$26.90	\$23.70

WALL/DESK MOUNT LED GOOSENECK LAMP

This lamp fitting will be at home in a boat, caravan or the bedroom at home. It features a sturdy 30cm gooseneck with screw-down base at one end and 9-LED luminaire at the other. The LED's are cool white. Once the base is fixed the gooseneck can be swivelled at almost any angle (greater than counterpoise lamps) for comfortable reading or, say, highlighting a painting etc.

- 12V Powered
- LED: 9 x Cool White
- Light Output: 75 Lumens
- Dimensions: 400(L) x 50(W) x 35(H)mm



↑ Lumens	Colour	Cat.	Qty 1+	Qty 5+	Qty 10+
75	Cool White	SL-3473	\$19.95	\$17.70	\$15.70

GARDEN LIGHTING

CABLE SPLITTER TO SUIT ORIGINAL GARDEN LIGHTING

Power splitter to suit our original garden lighting range (SL-2755 and SL-2756).

- 1 x input to 3 x Output
- IP67 waterproof rated
- 3m long



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Cable Splitter - 3m	SL-2753	\$12.95	\$11.35	\$10.35

WORKLIGHTS HANDHELD

100 LUMEN COMPACT LED WORKLIGHT

Keep it in the glove box, toolbox, back of the car, kitchen drawer, or anywhere you think you might need to keep such a neat and compact little work light. With 100 lumens of light from 20 SMD LEDs, it has enough light to help find the hidden bolts in your engine bay, or to even be used to light up inside your tent while camping. Features a fold out hook for hanging, and an adjustable arm with magnetic base to attach it to any metal surface. Also has 3 x LEDs at the top to use as a torch.

- Powered by 3 x AAA batteries (included)
- Dimensions:
With hook folded: 98(H) x 67(W) x 34(D)mm
With hook extended: 138(H) x 67(W) x 34(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
100	ST-3270	\$9.95	\$8.75	\$7.75

150 LUMEN TORCH WITH GOOSENECK & MAGNETIC BASE

A tough & handy LED work light suitable for use at home, in the car, garage and even the office. Position the light exactly where you need it with flexible tube & powerful magnetic base, the high powered 3W LED will emit a very bright focused beam.

- Aluminium build, designed to last.

Specifications	ST-3460
Output	150 lumens
Burn time	15 hours
Water resistant	Yes
Batteries	3 x AA (not included)
Dimensions	35(D) x 180(L)mm



↑ Lumens	Cat.	Qty 1+
150	ST-3460	\$24.95

180 LUMEN COB LED AUTO WORKLIGHT

A must have handy worklight for every toolbox, workshop or glove box. This versatile worklight can be used comfortably by hand or hands-free using the flip-out hook or strong magnets in the base that adjusts 180° for the best angle. The worklight also doubles as a hand torch using the 6 x white LEDs in the end. Features a chip-on-board (COB) LED for an evenly spread light, switch to toggle between worklight or torch, and a soft rubber finish.

- LED type: 3W COB
- Brightness: 180 lumens
- Battery type:
Requires 3 x AA batteries
- Dimensions:
183(L) x 60(W) x 33(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
180	ST-3272	\$14.95	\$13.45	\$11.95

250 LUMEN RECHARGEABLE AUTO WORKLIGHT WITH COB LED

A rechargeable worklight for every toolbox, workshop or glove box. It can be used comfortably by hand or hands-free using the flip-out hook, strong magnets in the base, or magnets in the swivel stand that adjusts 180° for the best angle. The worklight also doubles as a hand torch using the white LEDs in the end. Features a chip-on-board (COB) LED for an evenly spread light, switch to toggle between worklight or torch, has a soft rubber finish. Charge using the supplied mains charger.

- LED type: 3W COB + 0.5W LED
- Brightness: 250 lumens
- Battery type: Built-in 1200mAh Lithium rechargeable
- Burn time: 4 to 5 hours
- Dimensions: 220(L) x 60(W) x 45(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
250	Rechargeable ST-3274	\$39.95	\$35.90	\$31.90

300 LUMEN 12VDC LED WORKLIGHT

This unit is virtually shatterproof as it uses LED's instead of fragile fluoro tubes. Has 60, yes, 60 superbright LED's housed in a polycarbonate lens, IP65 rated with PVC casing. Comes with a 3m curly cord with a cigarette lighter plug.

- 12VDC
- Strong rear magnet
- Swivel hook
- 450mm Long + Hook



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
300	12VDC ST-3264	\$23.95	\$21.35	\$18.95

300 LUMEN RECHARGEABLE COB LED AUTO WORKLIGHT

A rechargeable worklight that utilises the new COB (chip on board) LED technology which packages the LED chips together. When illuminated it looks like a single lighted panel rather than an array of LEDs which can at times be glaring to look at. The packing together of LEDs also means greater light output per square cm. This unit comes with a recharging dock and can be recharged from a 230VAC or 12VDC source. Can be used in car repairs, roof insulation work, camping, travel and more.

Specifications	ST-3262
LED	Chip On Board
LED colour	Cool white
Recharge time	3.5 - 4 hours
Burn time	Up to 4 hours
Lumens	300
Batteries	3.7V Li-ion included
Dimensions	288(L) x 60(W) x 45(D)mm



↑ Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
300	Rechargeable ST-3262	\$69.95	\$62.95	\$55.95

LED WORKLIGHTS & FLOODLIGHTS

SUPERBRIGHT LED WORKLIGHTS / FLOODLIGHTS

2-IN-1 LED FLOOD/WORK LIGHTS – IP65 – 240VAC

Introducing our new and improved 2-in-1 240VAC flood/worklights. Each featured with a detachable stand with handle for portability inside a workshop or in construction site. The flood/worklights can also be mounted on the wall without using the detachable stand for more permanent applications such as garden, driveway, deck, hallway and other entry ways. The extremely low wattage power consumption keeps the running costs down and produce plenty of light to illuminate a wide area. Weatherproof rated (IP65) with high-strength tempered glass cover and high-pressure die cast aluminium shell which makes them extremely durable and robust to suit most outdoor applications. Powered by 240VAC mains with full electrical safety approval..

3 models available:



New & Improved
2-in-1 models for wall
mount or portable



500 LUMEN 10W - 2-IN-1

Specifications	SL-2876
Outdoor rated	IP65
Power consumption	10W
Colour	Cool white
LED Life	Greater than 50,000 hours
LED module dimensions	115(L) x 85(W) x 85(D)mm
Stand dimensions	235(H) x 148(W) x 165(D)mm

1500 LUMEN 30W - 2-IN-1

Specifications	SL-2877
Outdoor rated	IP65
Power consumption	30W
Colour	Cool white
LED Life	Greater than 50,000 hours
LED module dimensions	225(L) x 185(W) x 125(D)mm
Stand dimensions	310(H) x 275(W) x 225(D)mm

3800 LUMEN 50W - 2-IN-1

Specifications	SL-2699
Outdoor rated	IP65
Power consumption	50W
Colour	Cool white
LED Life	Greater than 50,000 hours
LED module dimensions	285(L) x 230(W) x 145(D)mm
Stand dimensions	390(H) x 335(W) x 225(D)mm

↑ Lumens	Watts	Cat.	Qty 1+	Qty 5+	Qty 10+
500	10W	SL-2876	\$34.95	\$31.45	\$27.90
1500	30W	SL-2877	\$79.95	\$71.95	\$63.95
3800	50W	SL-2699	\$129.00	\$115.95	\$102.95

2-IN-1 POWERED LED WORKLIGHTS - 12VDC

Handy LED worklight that can be powered from the cigarette lighter socket in your car. Perfect to add light to your campsite, or while repairing your car. High-strength tempered glass cover with durable aluminium case gives extra strength to the light with protected charging slots. They come with a foam grip handle to make it easy to handle. Weather resistant (IP65) so it can be used in poor weather conditions.

Supplied with 3m cigarette lighter type power lead.



NEW
2015

NEW & IMPROVED
2-in-1 models for wall
mount or portable



Specifications	SL-2815	SL-2817
Working Voltage	12VDC	12VDC
Power	10W	30W
Lumen	500	1500
Ingress rating	IP65	IP65
Emitting colour	Cool white (6000K)	Cool white (6000K)
Life time	>50,000 hours	>50,000 hours
Charging cable length	3m cigarette power lead	3m cigarette power lead
Dimensions	115(L) x 110(W) x 85(H)mm	225(L) x 185(H) x 125(W)mm

↑ Lumens	Watts	Cat.	Qty 1+	Qty 5+	Qty 10+
500	10	SL-2815	\$34.95	\$31.45	\$27.90
1500	30	SL-2817	\$89.95	\$80.95	\$71.95

SUPERBRIGHT LED FLOODLIGHTS

1,500 LUMEN 30W LED FLOODLIGHT WITH PIR SENSOR

Extremely bright LED floodlight with a PIR sensor suitable for use in warehouses, business entry/exit points, or other sensitive areas. The PIR features 3 adjustable dials (sensitivity, time, and lux) to customise the light for your preference. The sensitivity dictates the range of the PIR. Set it to max for picking up movement at longer distances. The time dial sets how long or short the light will stay on for. The lux setting allows you to specify if it should only trigger during the night or day time. Tough tempered glass cover and a high-pressure diecast aluminium shell means it will withstand the elements.

Specifications	SL-2698
Rating	IP65
Power consumption	30W
Lumens	1500
Colour	Cool white
LED Life	Greater than 50,000 hours
LED module dimensions	307(L) x 223(W) x 135(D)mm
Power input	240VAC

PIR Specifications	
Detection range	180°
Detection distance	5-12m (adjustable)
Day/night function	3-2000 LUX (adjustable)
Timer function Min	10 seconds (+/- 3 seconds)
Max	7 minutes (+/- 2 minutes)

↑ Lumens	Watts	Type	Cat.	Qty 1+	Qty 3+	Qty 6+
1500	30	Floodlight	SL-2698	\$89.95	\$80.95	\$71.95

FLOODLIGHT TRIPOD STAND WITH T-BAR

Suitable for mounting 2 floodlights for use in a variety of applications. Height is fully adjustable with a range of 825mm (0.8m) to 1631mm (1.6m). Once your floodlights are mounted on the t-bar they can be easily rotated 360°. Aluminium construction shielded with yellow anodised metal cast paint to protect against the elements.

Suits all floodlights shown on this page

Specifications	
Maximum height	1631mm
Minimum height	825mm
T-Bar width	491mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Tripod	SL-2875	\$29.95	\$26.90	\$23.70

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SUPERBRIGHT RECHARGEABLE FLOODLIGHTS & WORKLIGHTS

1,500 LUMEN RECHARGEABLE 30W LED FLOOD & WORKLIGHTS - IP65

A range of mobile LED work lights for those who need lots of light without a mains connection. They include rechargeable batteries so you can keep one in the car or caravan to shine a huge amount of light on your engine, or a campsite but can also be mains powered if needed. Toughened glass covers will protect the LED from knocks and shield it from the elements. Supplied with mains charger.

- Burn time: 3 hours
- IP65 rating
- Efficiency: 90%
- Colour: Cool white
- LED Life: Greater than 50,000 hours
- Lens angle: 120°
- Power input: 240VAC (mains charger)

SL-2889

SL-2886

NEW
LOW
PRICE



↑	Lumens	Watts	Type	Dimensions	Cat.	Qty 1+	Qty 5+	Qty 10+
	1500	30	Floodlight	225(L) x 185(W) x 125(D)mm	SL-2889	\$99.95	\$89.95	\$79.95
	1500	30	Worklight	350(L) x 210(W) x 219(D)mm	SL-2886	\$149.00	\$133.95	\$118.95

1,100 LUMEN 20W RECHARGEABLE DIMMABLE LED WORKLIGHT

Ideal for lighting up the backyard or campsite where mains power is not readily available. Features two light settings, bright or dim, which can help extend the time between charges. It has a durable high-pressure die cast aluminium case with high-strength tempered glass cover. It is weather resistant and has a water-resistant and dustproof power switch and charging port.

- Supplied with a 240VAC mains charger.
- Exceptionally handy and portable!



NEW
2015



Specifications	
Charge time	5 hours
Burn time	3 hours
Ingress rating	IP65
Power consumption	20W
Efficiency	90%
Colour	Cool white (6000K)
LED Life	Greater than 50,000 hours
Lens angle	120°
Power cable length	970mm
Dimensions (lighting area)	180(L) x 35(H) x 100(W)mm

Can be removed from frame for permanent floodlight

↑	Lumens	Watts	Cat.	Qty 1+	Qty 5+	Qty 10+
	1100	20	SL-2802	\$119.00	\$106.95	\$94.95

RECHARGEABLE 10W LED DIMMABLE WORKLIGHT

Features a built-in rechargeable battery so you don't need to be tied to a mains power source, and a dimmable LED so you can adjust the brightness depending on your application, and to extend the time before needing a recharge. Durable high-pressure die cast aluminium shell, high-strength tempered glass cover and silicon covers over the charging port and power switch for dust and water resistance.

Specifications	
Charge time	5 hours
Burn time	3 hours
Charging voltage	8.4VDC
Rating	IP65
Power consumption	10W
Colour	Cool white
LED Life	Greater than 50,000 hours
Lens angle	120°
Power input	240VAC
LED module dimensions	109(L) x 115(W) x 87(D)mm

↑	Lumens	Watts	Cat.	Qty 1+	Qty 5+	Qty 10+
	500	10W	SL-2809	\$79.95	\$71.95	\$63.95

BRACKET CLAMP TO SUIT SL-2809

Bracket Clamp to suit SL-2809 above.



NEW
2015



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Bracket	SL-2819	\$9.95	\$8.75	\$7.75

SOLAR RECHARGEABLE 5W LED WORKLIGHT WITH USB CHARGER

This handy LED worklight is going to be at home in the garage, in the back of the car or 4WD, on the campsite or in your caravan. Using a 5W COB (chip on board) LED module it produces around 300 lumens of bright white light - plenty to light up the camp site, caravan awning or under the bonnet of your car. Powered by a lithium ion rechargeable battery pack which can be removed from the light and used as a 4400mAh power bank via the 1.0A USB charging port. Includes a mains charger, car charger, and of course the removable solar panel for recharging during the daylight hours.

- IP54 water resistant rated so it's safe if accidentally left out in the rain.



NEW
2015



Specifications	
LED	5W COB
Lumen output	300
Beam angle	120°
Charge time (Mains or Car)	5 hours
Solar charge time	8 hours
Burn time	3 hours
Charge voltage	9VDC
Weatherproof rating	IP54
USB charge output	5VDC, 1.0A
Dimensions (inc. stand & solar panel)	245(H) x 170(W) x 250(D)mm

↑	Lumens	Watts	Cat.	Qty 1+	Qty 5+	Qty 10+
	300	5	SL-2792	\$89.95	\$80.95	\$71.95

FOLDING, RECHARGEABLE TRIPOD LED WORKLIGHT

The ultimate work or floodlight! This stand-alone portable light is designed so that the entire unit compacts into 800mm in length and extends into a light on a tripod up to 1.8m in height. Equipped with two Cree® XML T6 on a tilting head, it will produce a blinding 1200 lumens of light. There are three light modes; high, low and SOS. The unit has a removable rechargeable battery pack that is charged on the supplied docking charger. Comes with a carry bag to fit the light, cigarette charger and mains charger. An amazing all in one solution for all your lighting requirements.

- Supplied with 7.4V Li-ion 4400mAh removable battery pack
- Rainproof/IP53
- 2pcs Cree® T6 super bright LED fixtures included
- Includes carry bag etc.
- Includes 240V AC charger and 12V cigarette lighter charger lead



Specifications	
Charging time	2.5 hours
Run time	3.0 hours
Lumens	1200 lumens (high) 600 lumens (low)
Dimensions folded	800(L) x 120(Dia.)mm

↑	Lumens	Cat.	Qty 1+	Qty 5+	Qty 10+
	1200	SL-3240	\$199.00	\$178.95	\$158.95



WIRELESS WEATHER STATIONS

WEATHER STATION KEYRINGS

LCD WEATHER FORECAST (CARABINER FASTENING)

An mini LCD weather station for mountaineers, hikers, and those in the wilds. This little unit will display temperature, humidity and atmospheric pressure. It will also show the weather forecast and tendency based on the atmospheric pressure measured in the past 12 hours. Min/max readings on temperature/humidity are available at the push of a button and a carabiner is fitted for attachment to gear.

Barometer:

- Resolution of 0.1 hpa/mbar/0.03inHg
- Max / min for pressure
- Pressure history and graphical display for last 12 hours
- Electronic pressure weather forecast (sunny, slightly cloudy, cloudy, rainy)

Thermometer & Hygrometer:

- Max / min temperature memory
- Max / min humidity memory
- Temperature trend indicator
- Humidity trend indicator
- °C / °F selection

Time keeping:

- Clock with 12/24 hour format

Specifications	XC-0394
Pressure range	300 - 1099.9hpa/mbar/8.86 - 32.48inHg
Indoor temperature	0°C to +50°C
Indoor hygrometer	20% to 95%
Includes	1 x CR-2032 Lithium battery
Dimensions	54(H) x 45(W) x 22(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Mini Weather Station with LCD	XC-0394	\$29.95	\$26.90	\$23.70

WIRELESS WEATHER STATIONS

COMPACT WIRELESS WEATHER STATION/CLOCK/CALENDAR

This stylish unit features moon phases for the Australian/NZ region. It does not have wind speed/direction but has everything else. It has an external temperature/humidity, barometric sensor, (which really should be on an outside window sill so that you can easily access it for battery change).

It has fantastic time logging:

- Clock, clock alarm/snooze
- Calendar, including Day announcement
- Barometer trend log
- Weather forecast icons: Sunny, Partly Cloudy, Cloudy, Rainy, etc
- Moon phase display (with tide indication)
- Sunrise/sunset time display
- Temperature/humidity display
- Temperature alert alarm

Specifications	XC-0366
Transmitter frequency	433MHz
Power	2 x AA & 2 x AAA (not included)
Dimensions	Console: 220(W) x 141(H) x 36(D)mm Transmitter: 100(W) x 55(H) x 22(D)mm

All-in-all excellent value for money.



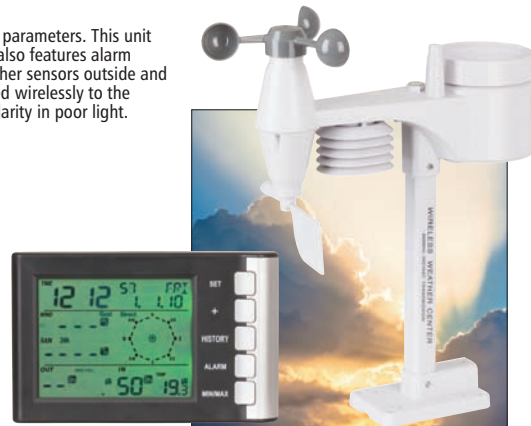
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Compact Wireless Weather Station	XC-0366	\$59.95	\$53.95	\$47.90

WIRELESS WEATHER STATION WITH 5.5" MINI LCD

Keep a weather station in the house to get a quick and accurate view of various weather parameters. This unit records temperature, wind chill, wind speed/direction, dew point, humidity and more. It also features alarm modes for temperature, humidity, wind chill and more. Easy to setup, just place the weather sensors outside and keep the LCD inside as a free standing unit or mounted on a wall. Data will be transmitted wirelessly to the display unit over distances up to 100m. It features an LED backlight for greater reading clarity in poor light.

- Records min/max temperature
- Wind direction
- 12 or 24 hour time display
- Time alarm

Specifications	XC-0400
Temperature range (Outdoor)	-40°C to 65°C (-40°F to 149°F)
Temperature range (Indoor)	-9.9°C to 60°C (-14°F to 140°F)
Windchill	-40°C to 65°C (-40°F to 149°F)
Weather alarm mode	Temperature, humidity, wind chill, dew point, rainfall, wind speed
Wind speed	km/h, mph, m/s, knots, Beaufort
Power	Outdoor sensor requires 2xAA 1.5V LR6 Alkaline batteries and 3xAAA 1.5V LR6 Alkaline batteries for Base station. Power supply included for base station.
Dimensions (Base Station)	172(H) x 119(L) x 31(W)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Wireless Weather Station with 5.5" Display	XC-0400	\$94.95	\$85.50	\$75.95

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XC-0331



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WIRELESS WEATHER STATIONS (CONTINUED)

PROFESSIONAL WIRELESS WEATHER STATION WITH 5.5" LCD DISPLAY

Monitor weather activity from the comfort of your home with this wireless weather station. The main LCD display unit will sit inside and receive data from a 5-in-1 outdoor sensor up to 150m away (line of sight). Measurement capabilities include indoor/outdoor temperature and humidity, rainfall and windspeed. Features hi-lo alarms that will trigger when user defined criteria are met for example, alarm when temperature reaches 40°C. Barometric pressure records are computed to forewarn users of incoming storms, snow, or general sunny/cloudy conditions. Wind speed is available and measured on the Beaufort scale (an international scale of wind velocities from 0 calm to 12 hurricane force). Users can also view records of rainfall including rain rate over daily, weekly, or monthly ranges. Wind chill, heat index, dew-point as well as comfort level readings are also viewable on the LCD.

- Dimensions: 140 (L) x 90(W) x 28(D)mm
- Requires 3 x AA Batteries

Indoor Barometer	XC-0410
Barometer units	hPa, inHg, mmHg
Measuring range	850 to 1050hPa
Resolution	1hPa, 0.01inHg, 0.1mmHg
Accuracy	± 5hPa / ± 0.15inHg/ ± 3.5 mmHg
Weather forecast	Sunny/clear, slightly cloudy, cloudy, rainy, rainy/stormy, and snowy
Display modes	Current, max, min, historical data for last 24hrs
Memory modes	Max and min from last memory reset (with time stamp)
Outdoor / Indoor temperature	
Temp unit	°C or °F
Displayed range	-40°C to 80°C (outdoor) / -40°C to 70°C (indoor)
Resolution	0.1°C or 0.1°F
Accuracy	± 1°C (indoor) / ± 0.5°C (outdoor)
Display modes	Current, min and max, historical data for past 24 hours
Memory modes	Max and min from last memory reset
Alarm	Hi/lo temperature alert
Outdoor / Indoor humidity	
Displayed range	1% to 99% (outdoor) / 20% to 90% RH (indoor)
Operating range	1% to 99% (outdoor) / 20% to 90% RH (indoor)
Resolution	1%
Accuracy	± 3% typical @ 25°C (outdoor) / ± 5% typical @ 25°C (indoor)
Display modes	Current, min and max, historical data for past 24 hours
Memory modes	Max & min from last memory reset (with timestamp)
Alarm	Hi/Lo temperature alert
Rain gauge	
Rainfall unit	mm or inch
Range	0-9999mm (0-393.7inches)
Resolution	0.4mm (0.0157in)
Accuracy for rainfall	± 7%
Display modes	Rainfall (Rate/Daily/Weekly/Monthly) Historical data for past 24 hours
Hi Rainfall Alert	Yes



Wind Speed	
Wind speed units	mph, m/s, km/h, knots
Wind speed range	0-112mph, 20m/s, 180km/h, 97knots
Wind speed resolution	0.1mpg or 0.1 knot or 0.1m/s
Speed accuracy	<5m/s: ±0.5m/s; >5m/s: ±6%
Display modes	Gust/average wind speed & direction. Historical data for past 24 hours
Memory modes	Max gust speed with direction (with time stamp)
Hi wind speed alert (average/gust)	
Radio-controlled/Atomic clock	
Synchronization	Auto or disabled
Clock display	HH:MM:SS / Weekday
Hour format	12hr AM/PM or 24hr
Calendar	DD/MM/YR or MM/DD/YR
Weekday in 5 languages:	English, French, German, Spanish, Italian

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Pro Wireless Weather Station with 5.5" Display	XC-0410	\$149.00	\$133.95	\$118.95

TOUCH SCREEN USB WIRELESS WEATHER STATION WITH SOLAR POWERED SENSORS

A highly advanced weather station with an unbeatable range of features to keep you fully updated on current and future atmospheric activity. The outdoor sensors are simple to install and will wirelessly transmit data to the base station which interprets and displays the data on the touch screen panel. You can also connect the base station to your PC through USB and upload all recorded weather data for more in-depth analysis. Now supplied with a solar panel with rechargeable batteries, it can be installed remotely and never worry about battery replacement. The sensors will read indoor/outdoor temperature, wind speed, wind chill, wind direction, dew point, humidity, rainfall and barometric pressure and is solar powered so you don't have to think about batteries. The weather tendency indicator will inform you of changing conditions based on fluctuating barometric pressure and there are programmable alarm modes for all of the recordable weather conditions so you will know if a storm is coming or if winds are too gusty for your Sunday picnic. All minimum and maximum weather values are recorded with the time and date of recording and are stored on the base station for your reference. Display unit requires 3 x AA batteries.

Features:

- Solar powered sensors
- Touch screen LCD panel
- Wind speed
- Wind direction
- Wind chill
- Dew Point
- Weather forecast tendency arrow
- Weather alarm modes for: temperature, humidity, wind chill, dew point, rainfall, wind speed, air pressure, storm
- Time display hours, mins, date
- 100 year calendar display
- Weather symbols and barometer tendency display
- Perpetual calendar
- LED backlight

Specifications	XC-0348
Indoor temperature range	0°C to 50°C +/- 1.0°C
Outdoor temperature range	-40°C to 65°C +/- 1.0°C
Humidity range	10% - 99%
Hygrometer range	1%RH- 99%RH
Wind chill	Yes
Wind Speed	Yes
Rain gauge	0 - 9999mm
Dew Point	Yes
Wind Direction	Yes
Weather history record	Yes
Barometric Pressure	Yes
Frequency	433MHz
Wireless transmission range	50m
Display unit dimensions	230(L) x 145(W) x 35(H)mm
Height of outdoor mast	570mm/with sensors: 630mm



Spare part - sold separately
2 x Spare rechargeable alkaline batteries Cat. XC-0343



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Wireless Weather Station with Touch Screen	XC-0348	\$169.00	\$151.95	\$134.95
Spare Battery - Pkt 2	XC-0343	\$9.95	\$8.75	\$7.75

WIRELESS WEATHER STATIONS

WIRELESS WEATHER STATIONS (CONTINUED)

PROFESSIONAL WIRELESS WEATHER STATION WITH IP ACCESS

Measure and record temperature, wind speed, rainfall then share the data on crowd-source powered websites such as Weather Underground (wunderground.com). The wunderground website will allow you to sync your recorded weather data to their database which will be available on your personal online dashboard. This data can be viewed by people worldwide, and also contributes to accurate regional weather forecasts. Users can scroll through hundreds of local neighbourhood weather stations to see what other users stations are measuring. Create a free account at www.wunderground.com to get a glimpse of what you'll be able to do.

There are numerous Smartphone apps available adding a high level of convenience for viewing a myriad of weather readings accompanied with graphs, infographics, animations and more.

The station itself includes all the features you would expect including temperature, rain fall, humidity, wind speed as well as luminance. A small black unit connects to your router and receives data from the weather sensors which it uploads online.

Specifications	XC-0420	Indoor Transmitter Specifications	
Transmission distance	100m (330 feet)	Indoor temperature range	-10°C-60°C
Frequency	433 MHz / 868MHz / 915MHz (option)	Resolution	0.1°C
Temperature range	-30°C-65°C	Measuring range rel. humidity	1% - 99%
Accuracy	+ / - 1°C	Resolution	1%
Resolution	0.1°C	Measuring range air pressure	300-1100hPa (8.85-32.5inHg)
Measuring range rel. humidity	1% - 99%	Accuracy	+/-3hpa under 700-1100hPa
Accuracy	+/- 5%	Resolution	0.1hPa (0.01inHg)
Rain volume display	0 - 9999mm	Alarm duration	120 sec
Accuracy	+ / - 10%		
Resolution	0.3mm		
Wind speed	0-50m/s		
Accuracy	+/- 1m/s		
Light	0-400k Lux		
Accuracy	+/-15%		
Measuring interval outdoor sensor	16 sec		



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Pro Wireless Weather Station with IP Access	XC-0420	\$249.00	\$225.00	\$198.95

PROFESSIONAL WIRELESS WEATHER STATION WITH 7" COLOUR LCD & SOLAR POWERED SENSORS

A professional grade weather station coupled with a 7" colour LCD that will measure almost anything planet earth can throw at it. It's capable of displaying temperature, wind speed, wind direction, wind chill, barometric pressure, and dew point. You can see how much rain has fallen in 1 hour, a day, a week, or a month, see the current UV index reading, and even see the current lux measurement outdoors which is great for those who have rooftop solar arrays. Install the sensors outside and the readings will be transmitted wirelessly to the base unit up to 100m away.

Minimum and maximum weather values are all recorded along with the corresponding date and time of occurrence. It also features a high/low alarm which will display a visual and give an audible warning when a measurement exceeds or drops below the current record. The threshold for these alarms can be manually configured. The main base is fully solar powered so you need not worry about mains power or constantly adding new batteries. There is a separate indoor sensor that has inbuilt display for temperature, humidity, and barometric pressure.

The interface is beautifully designed and features attractive weather symbols to indicate atmospheric status, everything is clear and easy to read, settings are easily accessible with the buttons on the front of the screen where you can navigate to history, graphs, and setup. The display backlight can be manually turned on/off via the front panel, or automatically at set times so for example it will switch off 8.30pm at night. You can also calibrate values if you happen to notice certain readings are off.

Overall a highly functional weather station brimming with features.

Features:

- Time and date display (HH:MM:SS)
- Alarm clock
- Display night switch
- Records of all minimum and maximum values with time/date of recordings
- microSD Card memory

Specifications	XC-0369
Outdoor/indoor temperature	-40°C - 60°C / -40°F - 140°F
Outdoor/indoor humidity	1% - 99%
Wind speed	0-50m/s / 0-100mph (km/h, knot, mph, bft, ft/s, m/s)
Wind gust	km/h, knot, mph, bft, ft/s, m/s
Wind direction	Degrees, cardinal directions
Wind chill	Yes °C / °F
Dew point	Yes °C / °F
Rain gauge	0-9999mm, inch (Daily, weekly, monthly, yearly)
Rain rate	mm/hr, in/hr
Weather forecast symbols	Sunny, partly cloudy, cloudy, rainy, storm
Barometric pressure	300-1100hPa / 8.85-32.5inHg) hpa, in Hg, mm Hg (Absolute, Relative)
UV index	uW/cm2
Solar radiation (lux) meter	0-400k Lux (W/mm2, lux, fc)
Recording interval	1 to 240 mins (tabulated and graphic with zoom)
Wireless sensor transmission range	100m
Mounting hardware	Pole, U bolts, clamps, nuts
Level indicator	Bubble
Display unit dimensions	195(W) x 138(H) x 20(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Pro Wireless Weather Station with 7" Display	XC-0369	\$349.00	\$315.00	\$279.00

DESKTOP THERMOMETERS & CLOCKS

INDOOR DESK THERMOMETER

Handy desk or table-top thermometer. Measures degrees Celsius with hi and low memory. Tilting bail for standing on desk purposes.

- Battery included.

Specifications	
Range	-20 - 50°C
Dimensions	64(W) x 72(H) x 18(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Indoor Version	QM-7316	\$5.95	\$5.50	\$4.75

LCD CLOCK WITH THERMOMETER

A slimline LCD clock that displays both the time and temperature simultaneously on a large, easy to read display. Stylish design with white face and silver coloured surround.

- Desk or wall mount
- 12/24 hour selectable
- °C / °F selectable
- Digit height: 35mm
- Temperature range: 0°C - 50°C
- Requires 2 x AAA batteries
- Dimensions: 215(L) x 73(H) x 22(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Clock with Temp	XC-0230	\$19.95	\$17.95	\$15.70

DIGITAL FRIDGE/FREEZER LCD MINI THERMOMETER

See at a glance that your favourite food or beverage is at the correct temperature in the fridge or freezer. Hang it from a wire shelf, stand on a shelf or attach to a metal surface with the built-in magnet. Stylish design with white face and silver colour surround.

- Selectable °C / °F
- Digit height: 23mm
- Temperature range: -19°C to 49°C
- Batteries: 1 x CR2025 included
- Dimensions: 68(L) x 44(H) x 12(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Mini Thermometer	QM-6323	\$9.95	\$8.75	\$7.75

JUMBO DISPLAY IN/OUT THERMOMETER

One display that shows both the inside and outside temperatures simultaneously. It will also record the minimum and maximum temperatures. The outside temperature sensor is waterproof and is on a 3 metre cable. It also has a tilting bail for standing as well as a keyhole for wall mounting. Jumbo digits for the optically challenged.

Specifications	
Temperature range	-39.9°C to 49.9°C
	-39.8°F to 122°F
Battery	Requires AA
Dimensions	95(W) x 140(H) x 22(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Jumbo Display	QM-7310	\$19.95	\$18.70	\$15.70

WIRELESS IN & OUT LCD THERMOMETER

Keep an eye on the outdoor and indoor temperature with ease. This thermometer is comprised of two parts. An LCD display/receiver to keep inside and a wireless outdoor temperature sensor which transmits the outdoor temperature back to the display.

- No need to expose the LCD to the elements.
- Great for monitoring computer server rooms, wine cellars, effectiveness of housing insulation, or for simply wanting to know the differentiation in temperature.

Specifications	
Indoor temperature range	0°C to 60°C
Outdoor temperature range	-40°C to 60°C
Display unit requires	2 x AAA batteries
Remote requires	2 x AAA batteries
Transmission frequency	433.92MHz
Receiver dimensions	86(H) x 57(W) x 18(D)mm
Sensor dimensions	68(H) x 50(W) x 21(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Thermometer	XC-0321	\$19.95	\$17.70	\$15.70

JUMBO DISPLAY THERMOMETER/HYGROMETER

Displays the temperature and humidity together on the one huge LCD display. It also has a min / max function (memory). Switch between °C and °F.

- Requires AAA battery



Specifications	
Temperature	-10° - 60°C (14° - 140°F)
Humidity	10 - 99% +/-5%
Accuracy	+/-1°C, +/-1.8°F
Dimensions	110(H) x 100(W) x 22(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Jumbo Display	QM-7312	\$24.95	\$23.35	\$19.70

WIRELESS IN & OUT THERMOMETER/HYGROMETER

An advanced thermometer/hygrometer capable of measuring indoor and outdoor temperature, as well as relative humidity. The large easy to read LCD acts as a receiver unit for a separate outdoor sensor unit. It will record max and minimum temperatures for quick referral and conveniently displays the time of day. Ideal for temperature or humidity sensitive environments such as museums, greenhouses, or to check if your home and office is too dry or moisture laden. The LCD receiver unit is capable of receiving information from up to 3 sensor units, which are available separately (See Cat. XC-0324).



- Additional sensor available separately - XC-0324.

Specifications	
Indoor temperature range	0 + 60°C
Remote temperature range	-45 + 65°C
Temperature accuracy	+/-1.0°C
Humidity range	1% to 99%
Transmission frequency	433.92MHz
Transmission range	Up to 100m open air
Power requirements (receiver)	2 x AA alkaline batteries (not included)
Power requirement (remote)	2 x AAA alkaline batteries (not included)
Receiver dimensions	95(H) x 114(W) x 25(D)mm
Sensor dimensions	51(H) x 63(W) x 25(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Thermometer/Hygrometer	XC-0322	\$29.95	\$26.90	\$23.70
Extra Sensor	XC-0324	\$15.95	\$14.35	\$12.70

8 CHANNEL WIRELESS THERMOMETER HYGROMETER WITH JUMBO LCD

Useful for monitoring temperature and humidity sensitive areas. An oversized receiver/LCD makes for easy reading, up close and from afar. Displays real-time data, comfort and trend indicators and stores min/max records. Can support up to 8 indoor/outdoor sensors.

- Measures indoor/outdoor temperature and humidity
- Receive up to 8 channels
- Comfort level indicator
- Temperature and humidity trend indicator
- Temperature and humidity min/max records



Specifications	
Transmission frequency	433.92MHz
Transmission range	approx 90m
Indoor temperature range	0°C to 60°C
Outdoor temperature range	-40°C to 60°C
Batteries required	
Receiver requires	2 x AAA batteries (not included)
Sensor requires	4 x AAA batteries (not included)
Dimensions	94(L) x 94(W)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Thermometer/Hygrometer	XC-0328	\$44.95	\$40.45	\$35.90
Spare Thermometer/Hydrometer	XC-0329	\$17.95	\$15.95	\$14.35

ENVIRONMENT MONITORS

DESKTOP THERMOMETERS & CLOCKS (CONTINUED)

LED WALL CLOCK WITH CALENDAR & TEMPERATURE DISPLAY

A large wall mountable LED clock that cycles between time, calendar (date/month), and temperature display. Features blue LEDs behind a black opaque covering which gives a high level of contrast for easy reading. Time can be displayed in 12 or 24 hour format, the date can be adjusted for dd/mm or mm/dd display, and the temperature can be displayed in Celsius or Fahrenheit. An easy to setup and install multifunction clock, perfect for warehouses, retail environments, or medical waiting rooms. Comes with an infrared remote control for ease of settings control.

- Mounting holes on rear
- Supplied with 9VDC plugpack
- Requires 1 x AAA for battery backup
- Dimensions: 400(L) x 164(W) x 40(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Wall Clock with Temp	XC-0239	\$99.95	\$89.95	\$79.95

RAIN GAUGE PRO

DIGITAL RAIN GAUGE WITH TEMPERATURE

This Digital Rain Gauge with Temperature has a wireless self-emptying rain collector for measuring rain fall and temperature. The wireless rain collector sensor transmits data by using a low power radio frequency to the display main unit that can be located up to 150m away (line of sight). The display unit stores the data over a time range to allow you to monitor and analyse the weather status for past 24 hours. It has advance features such as the HI/LO Alert alarm to alert you while the set high or low weather criteria are met. It allows you to analyse hourly, daily, weekly, monthly and yearly rain fall records. With radio-controlled / atomic clock feature built-in, the system is truly a remarkable personal but professional rain gauge for your own backyard.

- Large backlit LCD display unit
- Total Hourly, Daily, Weekly, Monthly and Yearly rainfall display
- Data logger stores and gathered data to display rainfall
- Graphical histogram display to show variation of rainfall pattern
- SINCE function to display TOTAL rainfall from a customized date
- Measures temperature
- Real time clock display with Atomic Radio Controlled function
- 150m sensor transmission range
- Data retention storage even during batteries changes
- High / Low Alert function
- Alarm function with ice-alert function



Specifications	XC-0430
Battery	2 x AA size 1.5V batteries (not included)
Support channels	wireless sensor (Rain gauge, thermo sensor)
Dimensions	155(H) x 95(W) x 23(D)mm
Weight	212g

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Rain Gauge	XC-0430	\$89.95	\$80.95	\$71.95

TANK LEVEL METER

ULTRASONIC WATER TANK LEVEL METER WITH THERMO SENSOR

Keep an eye on your outdoor water tank from the comfort of your own living room, up to 100m away. Installed at the top of your water tank, the transmitter unit measures the water level and temperature using an ultrasonic sensor. You can hang the receiver unit on a wall (hooks) or pull out the stand and place it on your kitchen bench top, table or desk. View your room's temperature, tank temperature and water level (represented by a 10 element bar graph). You can store min/max records and set alarms for specific water levels (high/low) or when empty.

- Transmission range up to 100m
- Time display (12/24hr)
- Time alarm mode
- Calendar display
- Indoor temp. display (°C/°F)
- Tank temp display (°C/°F)
- Tank level display (metre/feet)
- Water level displayed on a 10 element bar graph
- Min. & Max. records for indoor & tank temp.
- Tank level alarm mode (high/low)
- Tank empty alert
- Low battery indicator
- Tank level updated every 30 seconds or 3 mins
- Wall mount, Free standing
- Battery power: receiver 2 x AA 1.5V (not included), outdoor transmitter: 6 x AAA 1.5V (not included)
- Dimensions: Receiver: 106(L) x 97(W) x 24(D)mm
Sensor (into tank): approx 47(Dia.)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Water Tank Level Meter	XC-0331	\$74.95	\$67.50	\$59.95

ANEMOMETER

HAND-HELD ANEMOMETER WITH TRIPOD STAND

Measure wind speed in km/h, mph, ft/min, meters/sec or knots for your outdoor activity. It also indicates wind-chill, air temperature, comfort level and displays current, maximum and average wind speed. There is also a beaufort scale bar graph for a quick indication on the wind condition. Supplied with lanyard and tripod.

- Windspeed range: 0.3m/s to 30m/s
- LED backlit display
- Celsius and Fahrenheit selectable
- Temperature range: -29.9 to +59°C
- Temperature resolution: 0.1°C
- Comfort levels: Comfort, Cool, Cold, Extreme & Danger
- 3V button cell battery (CR2032) included
- Low battery detection and display
- Battery life: Approx 12 months
- Measures: 140(H) x 50(W) x 18(D)mm less stand.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Anemometer	QM-1644	\$69.95	\$62.95	\$55.95

WIND SPEED

ANEMOMETER/THERMOMETER

This unit is a more sophisticated version of our QM-1644 Anemometer. Firstly, it is capable of measuring wind/airflow parameters at the same time as monitoring temperature.

- Metres/sec; km/hr; feet/min; miles-per-hour; knots
- Cubic metres/minute; cubic feet/minute
- Air temp, 0-50 °C (0.1 °C resolution)
- Auto power off
- Vane impeller ball bearing mounted
- 1m vane probe lead



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Anemometer	QM-1646	\$129.00	\$115.95	\$102.95

TRAVEL ACCESSORIES

DIGITAL MAP MEASURE WITH LED LIGHT

Working out the distance between two points on a map or chart is easy with this navigation tool. The scale can be adjusted for any map. The LCD screen has a backlight for night use and an LED flash light. A must have gadget when out on the road, water, or in the bush.

- 10m measuring range
- Minimal distance on display: 1mm
- Backlight LCD
- LED Flashlight
- ON/OFF, light, unit, scale and trace buttons
- 1 x CR2032 3V battery Included
- Dimensions: 96(L) x 50(H) x 13(W)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Map Measurer	XC-0374	\$9.95	\$8.75	\$7.75

ELECTRIC FENCE

ELECTRIC FENCE ENERGISER - 10KM

Capable of electrifying up to 10km of fencing for enclosing livestock such as horses, chickens, cattle, sheep, etc. Installation is simple, connect up to a 12VDC lead acid battery via the alligator clips, and then using the binding posts, wire up to a suitably fitted electric fence wire and ground stake. You will need to ensure that you have the correct electric fence isolators, joiners wire and tape fitted to your fence to ensure it works properly - full instructions are included with the unit and available on our website. The required fencing components are available from most agricultural supply stores.

- 10km range
- 0.6 Joules
- Average power consumption: 10mA
- Max power: 12VDC 85mA
- 12VDC battery operated (recommended 4Ah or larger SLA)
- Minimum 3W solar panel recommended
- Dimensions: 171(H) x 95(W) x 45(D)mm



Note: DO NOT CONNECT TO MAINS ELECTRICITY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Fence Energiser	ME-6800	\$79.95	\$71.95	\$63.95

FANS

12VDC OSCILLATING FANS

Keep cool in the stifling heat. If you need some extra air circulation in your car or truck grab one of these fans, mount it, and away you go. The models are whisper quiet just connect to your cigarette lighter socket for power. The on/off switchbox includes screw mounting holes to give your installation a more permanent look.

Clamp and suction mount bracket versions available.

Specifications	
Power	12VDC
Dimensions	180(Dia.) x 145(D)mm
Switch	On/off oscillating switch
Cable length	2m



	Cat.	Qty 1+	Qty 3+	Qty 6+
Fan with Clamp	GH-1398	\$19.95	\$17.70	\$15.70
Fan with Suction Mount Bracket	GH-1399	\$24.95	\$22.35	\$19.70

PORTABLE CEILING FAN & LIGHT

Designed for use while camping, this battery powered ceiling fan is also great for use around the home or workshop. With a carabiner for easy setup you simply hang it anywhere you require some airflow and turn it on. The fan has soft foam blades for safety and two speed settings to match your cooling requirements. The bright white LEDs allow you to illuminate your tent or work area, while a softer yellow LED mode allows it to be used as a night light.

- Maximum Run Time: 48 hours
- Requires 4 x D batteries (not included)
- Dimensions: 220(Dia) x 145(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Battery Operated	YS-2804	\$39.95	\$35.90	\$31.90

RECHARGEABLE BATTERY OPERATED FAN

Beat any heat wave with this portable battery operated fan! Lightweight and powerful, it can be brought along to any BBQ, picnic and camping adventure. It's water resistance also makes it perfect for work sheds and near the pool. With its patented fan blade design and long running life, it really is the ultimate summer companion. Supplied with a power supply to charge the internal rechargeable batteries that can run for 6 hours when fully charged. It can also be powered by 8 x D cell Alkaline batteries (Available separately).

Specifications	
2-speed control	High & Low
Weight	1.8kg
Dimensions	300(L) x 90(W) x 330(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Rechargeable Batteries	GH-1062	\$89.95	\$80.95	\$71.95

PEST CONTROL

THE AMAZING FLYGUN

The Amazing Flygun is a spring powered gun that kills flies, mosquitos and cockroaches! It is fun, safe and easy to use. The swatter is simply pushed onto the gun and it is ready to use. A long string is also attached so the swatter won't get lost. It is then ready to be reloaded and fired again. It is fun, effective and really does work! It has proven extremely popular, with thousands being sold every month!



Safe for Kids
8 years +

TRUST US! THIS THING
REALLY WORKS!



	Cat.	Qty 1+	Qty 3+	Qty 6+
Flygun	YS-5545	\$7.95	\$6.95	\$6.25

PERSONAL SONIC INSECT REPELLER

Keep the mozzies away! With a range of 6 metres, it's perfect for camping, picnics fishing etc. It also has a pocket or belt clip to keep it handy.

- Requires AA battery: SB-2424.
- Dimensions: 75(L) x 25(Dia)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Insect Repeller	YS-5534	\$9.95	\$8.75	\$7.75

PHOTOCATALYST MOSQUITO TRAPS

Mosquitoes are attracted to the carbon dioxide humans emit and they are also highly sensitive to ultraviolet light. When the ultraviolet light in these units shines onto the titanium dioxide, it will emit carbon dioxide through a photocatalytic reaction. These two major elements will attract mosquitoes. When the mosquito gets too close to the unit, the fan will suck them into the capture compartment, once inside they can't escape and their exoskeletons will dry out eventually killing them. Far cleaner than using noxious mosquito coils, spray on repellent, etc. Mains power supplies included.

- To power from 12V use 12V Cigarette Lighter Lead PP-1997



INDOOR PHOTOCATALYST TYPE

- Power: 12VDC 500mA
- Consumption: 4W
- Dimensions: 170(L) x 115(Dia)mm

YS-5514

INDOOR/OUTDOOR TYPE

- Power: 12VDC 1000mA
- Consumption: 11W
- Detachable base for easy cleaning
- 11W Fluoro Globe
- Dimensions: 248(H) x 245(Dia)mm

YS-5516



SPARE 7W FLUORO GLOBE TO SUIT YS-5516

YS-5517

	Cat.	Qty 1+	Qty 3+	Qty 6+
Indoor	YS-5514	\$39.95	\$35.90	\$31.90
Indoor/Outdoor	YS-5516	\$69.95	\$62.95	\$55.95
Spare 7W Globe to suit YS-5516	YS-5517	\$9.95	\$8.75	\$7.75
12V Cigarette Lighter Power Lead	PP-1997	\$4.95	\$4.45	\$3.90

HIGH POWER 'FREQUENCY SHIFTING' ULTRASONIC PEST REPELLER - 140DB

This ultrasonic pest repeller uses frequency shifting techniques which may prevent pests from developing an immunity. The device has an output of 140dB that can protect up to 280 square metres. The repeller may be effective against mice, rats, roaches, fleas, flies, crickets, silverfish, waterbugs, moths, ants, spiders and most other common pests. The ultrasonic frequencies used are out of the hearing range of humans and most household pets such as cats, dogs, fish & birds etc. A test feature down shifts the frequency output to an audible range. We make no guarantees that this device will solve your particular problem, but there are thousands of people who swear by them.

- Supplied with mains plugpack and installation guide.
- Dimensions: 120(Dia.) x 75(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
140dB	YS-5520	\$34.95	\$31.45	\$27.90

DUAL SPEAKER PEST REPELLER

Emits ultrasonic sound waves which are extremely unpleasant for cockroaches, flies, crickets, silverfish, earwigs, mice and other nasty critters. Laboratory research has shown ultrasonic sound waves attack the auditory and nervous systems of most common pests causing them pain and discomfort. The high intensity sound waves will end up driving away these pests. The frequency can be manually adjustable from 22kHz up to 49kHz, for driving away certain pests. A clean alternative to using poison or dangerous traps. Includes mains power supply.



Specifications	
Frequency range	22kHz-49kHz (manual control)
Power consumption	2W
Output sound pressure	115dB x 2
Dimensions	155(L) x 90(W) x 85(D)mm

	Cat.	Qty 1+	Qty 3+	Qty 6+
2 x 115dB	YS-5528	\$54.95	\$49.45	\$43.90

SURVIVAL PRODUCTS

MULTITOOLS

SURVIVAL KNIFE WITH LED TORCH/FIRE STARTER/BELT CUTTER/ WINDOW BREAKER

Built for extreme adventures, the knife is crafted using Grade 420 stainless steel for maximum durability. A liner lock system allows you to effortlessly extract the blade with one hand, leaving the other one free. Use the serrated edge to cut with speed or the straight edge to cut with precision. The built-in LED light lets you see in the dark while the magnesium alloy fire starter lets you start your own campfire. If you find yourself trapped inside your own vehicle, use the belt cutter and window breaker for a quick escape.

- Grade 420 stainless steel construction with anodised aluminium handles
- Liner lock system
- Blade features straight and serrated edges
- Built-in LED light
- Magnesium alloy fire starter
- Belt cutter
- Window breaker
- Dimensions:
Open: 208(L)mm
Closed: 126(L)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Survival Knife	TH-1925	\$17.95	\$15.95	\$14.35

PLEASE NOTE:

Some age restrictions apply in some states for knife sales

12 IN 1 MULTI-FUNCTION TOOL WITH CARRY POUCH

Versatile and incredibly strong. Features an all aluminium frame and a locking mechanism that ensures the tool stays open until the job is completed. Its sleek and lightweight design enables you to take it anywhere, and it is a great alternative to carrying additional full-sized tools. Includes a file, bottle/can opener, saw, scissors, small and large knife, 3 sized standard screwdrivers, a Phillips head screwdriver, long nose pliers and an LED torch. Complete with a nylon pouch and a snap button loop for easy attachment to additional gear, the 12 in 1 Multi-Function Tool is a must have for any explorer.

- Dimensions: 99(L) x 43(W) x 18(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Multi Tool	TH-1926	\$29.95	\$26.90	\$23.70

SURVIVAL KIT

WATER BOTTLE SURVIVAL KIT

A handy survival kit to take camping, hiking, fishing, or stored in the boot of your car for emergencies. Stored within the water bottle are some necessities to keep your warm, dry, hydrated and safe if you find yourself lost in the bush, stranded on the side of the highway, etc.

Kit contains:

- 945ml BPA free water bottle
- Reusable rain poncho with hood
- Emergency survival blanket
- 18pc. First aid kit with alcohol pads, antiseptic cleaning pads, anti mosquito towelettes, sticky plasters and small bandages.
- 12hr light-stick
- Whistle to attract attention
- Waterproof matches
- Carabiner clip

Specification:

- Water bottle dimensions: 215(H) x 91(Dia.)mm
- Light stick length: 152mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Survival Kit	ST-3269	\$17.95	\$15.95	\$14.35

FIRE STARTERS

FIRE STARTER ROD KIT

A handy addition to the survival kit if you're going camping. Simply strike the flint rod and metal striker together to create a spark, even in wet or cold. Much easier than rubbing sticks together.

- Rod length: 60mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1933	\$8.95	\$7.95	\$6.95

FIRE BLANKETS

FIRE BLANKET

Designed for extinguishing small fires. The fire retardant fibreglass fabric will suffocate the flame quickly allowing you to restore safety. Keep one in your kitchen, workshop, boat, caravan, 4WD or at the campsite.

- Supplied in Soft Pouch

1M X 1M
Cat. GG-2340

1.2M X 1.8M
Cat. GG-2342



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
1m x 1m	GG-2340	\$11.95	\$10.70	\$9.50
1.2m x 1.8m	GG-2342	\$24.95	\$22.35	\$19.70

FIRST AID KIT

47 PIECE FIRST AID KIT

Ideal for the home, office, car or boat. This kit contains sticky plasters, bandages, safety pins, anti-bacterial solution, scissors and much more. All packed in a super durable, red high visibility nylon storage case.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
First Aid Kit	ST-3968	\$14.95	\$13.35	\$11.70

ROADSIDE ASSIST

ROADSIDE AUTO EMERGENCY KIT

A must have for every car, caravan, or boat for that extra travel security if you break-down or become stranded. The 10-piece kit includes some first aid items to patch up a bleeding hand, leads to jump start a car with a flat battery, LED head torch to help see around an engine bay at night, and rubber grip gloves to grab items without slipping.

- Custom storage case contents:
- 4 LED Head Torch
- Light Duty Jumper Cable Set
- Rubber Grip Gloves
- Tyre Pressure Gauge
- First Aid bandages and disinfectant pads
- Multipurpose tweezers
- Emergency rain poncho
- Requires 3 x AAA batteries for the head torch
- Case dimensions: 265(L) x 157(W) x 75(H)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Emergency Kit	ST-3267	\$24.95	\$22.35	\$19.70

LED EMERGENCY WARNING LIGHT WITH MAGNETIC BASE

A 9 x LED emergency light with a magnetic base for car breakdowns, campsites, or boating. The extra visibility can be critical in warning other motorists of your plight so they can slow down or avoid you in time. A must have for all motorists. Bright orange colour with attention grabbing red/white stripes.

- Requires 3 x AAA batteries
- 9 x LEDs
- Light modes: Constant on or flashing
- Dimensions: 140(L) x 140(W) x 35(H)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
LED Emergency Light	ST-3085	\$14.95	\$13.45	\$11.95

GAS MONITORING

ELECTRONIC LPG GAS LEVEL MONITOR

The clever unit attaches to your steel LPG bottle. It detects the gas in your bottle, (typically 9kg) and gives a musical alarm when the gas in your bottle is low. Don't run out of gas halfway thru a barbie ever again!

- Works on any steel LPG cylinder
- Uses 2 x AA batteries (supplied)
- Virtually no installation
- Magnetically attaches to cylinder



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QM-1662	\$12.95	\$11.35	\$10.35

GAS LEAKAGE DETECTOR

Gas leaks can be incredibly dangerous, even small ones. Run a quick check over your house or gas powered devices to make sure all outlets are safely sealed. Hold the power button for a few seconds and then place the detector near the suspected leak and visual/audible warnings will sound if the leak is bad, moderate or safe. Red (Hi), orange (Lo), and green (safe) LEDs denote the severity of the leak.



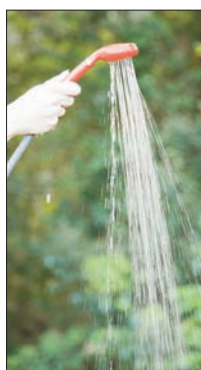
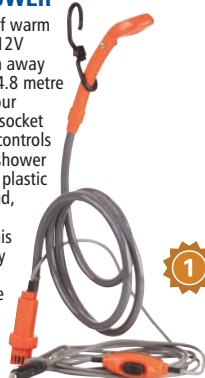
Specifications	
Requires	2 x AAA batteries (not included)
Sensor detects	butane, propane, acetylene, and methane (natural gas)
Dimensions	165(L) x 27(W) x 21(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2299	\$39.95	\$35.90	\$31.90

PORTABLE SHOWER

12V CAMPING SHOWER

All you need is a bucket of warm water and your vehicle's 12V battery and you can wash away the cares of the day. The 4.8 metre power cable plugs into your vehicle's cigarette lighter socket and a waterproof switch controls power to the pump. The shower comes with 2.1 metres of plastic tubing, pump, showerhead, hanging hook and a nifty carry bag to store it in. This self-contained little beauty even has a water flow control valve built into the showerhead and will become an indispensable part of your travelling kit.

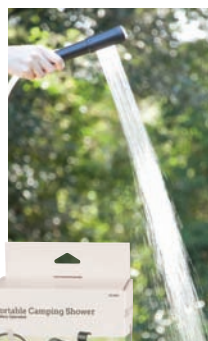


↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12VDC	YS-2800	\$29.95	\$26.90	\$23.70

PORTABLE CAMPING SHOWER - BATTERY OPERATED

This high quality portable shower is battery powered so you can use it almost anywhere. Simply drop the submersible pump into a clean water supply or attach it to a compatible water barrel, hang the shower head in a convenient location, and activate the pump with the push button switch. It can also be used as a direct water pump by detaching the shower head. Made from impact resistant ABS plastic with rubber seals all components are weather resistant.

- Hose Length: 2.5m
- Power Cable Length: 1.8m
- Requires 4 x D batteries (not included)
- Battery Pack Dimensions: 100(Dia) x 95(H)mm



NEW LOW PRICE

↑	Cat.	Qty 1+
Battery Operated	YS-2802	\$29.95

COLLAPSIBLE BUCKETS

COLLAPSIBLE BUCKET & WASH MITT KIT

A handy collapsible bucket with a wash mitt for keeping your car clean at home or on the road. The mitt is like wearing a mop on your hand, it is extremely effective at clearing away dirt and grime from your car, truck, 4WD or motorbike. When the washing is finished just fold it all away and store in the supplied pouch. Keep one in the boot!

- Thumbless wash mitt for either hand
- Bucket capacity: 10.5L
- Dimensions: 245(Dia.) x 38 - 265mm high



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	GH-1266	\$13.95	\$12.35	\$10.95

FOOD & BEVERAGE ACCESSORIES

LARGE PORTABLE STOVE - 12V

Perfect for cooking and/or storing food hot on those long trips. It gets up to 149°C and its insulated design keeps food hot, while the outside stays cool. It plugs into a 12V cigarette lighter socket in the car.

- Heats food in just 3 minutes
- Holds up to 3 litres
- Internal temperature up to 300°F/149°C
- Easy to setup and use
- Cable length: 1.9m



Dimensions:
• External: 270(L) x 200(H) x 170(W)mm
• Internal: 230(L) x 130(W) x 80(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12VDC	YS-2811	\$49.95	\$44.90	\$39.90

12V CAR KETTLE

Now you can stop, revive, survive anywhere. This kettle makes the ideal travelling companion for those who spend a lot of their time on the road. Simply plug into your car's cigarette lighter socket, mount to your car's interior and boil away. Holds up to 550ml and makes up to 4 cups of tea, coffee, soup or any other hot beverage. Note that this device is not the same as your domestic kettle which consumes much more power so boiling times will be longer.

- 2 cups, strainer and mounting bracket included
- Approx boiling times
300ml - 15min
500ml - 28min
- Dimensions: 235(H) x 95(dia)mm

Be prepared for a wait for your cuppa! It takes a LONG TIME for 12 Volts to boil water but it does eventually!



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12VDC	GH-1380	\$17.95	\$15.95	\$14.35

STAINLESS STEEL TRAVEL MUG WITH BUILT-IN HEATER

Keeps your coffee, tea, or other beverages hot while driving. This handy travel mug has a built-in, thermostatically controlled heater and will maintain one of four selectable preset temperatures (Room temp, Luke warm, Hot and Very Hot). The mug shows the actual temperature on an LCD and indicates the heating progress via the control panel display. The mug holds up to 500ml and has a anti-spill lid with retractable drinking spout.

- Stainless Steel construction with ergonomic handle
- Fits in a cup holder
- Heats from 10° to 70°C
- Celsius and Fahrenheit selectable
- Includes 1.5m detachable 12V lead with cigarette lighter plug



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12VDC	GH-1301	\$34.95	\$31.45	\$27.90

GIFT CARD

**Can't find what to buy?
Give a Jaycar Gift card
and let them choose!**



COOLERS & PORTABLE REFRIGERATION

12VDC THERMOELECTRIC PORTABLE COOLER & WARMER

14L 12VDC THERMOELECTRIC PORTABLE COOLER & WARMER

Here's a great way to keep your food and drink cool or warm in the car at the worksite or during the long road trip. It is extremely low noise and uses full foam insulation to keep it lightweight and portable. 12VDC powered, so it's simply a matter of connecting to your cars cigarette lighter socket and switch on either cooling or warming mode. Will fit a bottle of white wine or 2L bottle of milk lying down.

Specifications	GH-1373
Voltage	12VDC
Minimum temperature	18°C-20°C below ambient temp
Max Temperature	65°C
Capacity	14 litres
Power usage warming	38W
Power usage cooling	46W
CFC Free	
Dimensions	490(L) x 305(W) x 270(H)mm

THERMOELECTRIC HEATING/COOLING

This technology uses the "Peltier Effect" to increase or decrease temperature. It is fully solid state and is very reliable. It is quite inexpensive as it does not use gas compressor technology. The amount of temperature differential from ambient, is however, fairly modest. If you really want massive chilling or freezing capacity, you are better off saving your pennies and buying a POWERTECH compressor-type unit shown below.



	Cat.	Qty 1+	Qty 3+	Qty 6+
14L Cooler	GH-1373	\$99.95	\$89.95	\$79.95
Replacement Lead	PP-1986	\$17.95	\$16.10	\$14.35

PORTABLE FRIDGE / FREEZERS

12VDC/240VAC POWERTECH PORTABLE FRIDGE/FREEZERS

Utilising the renowned German Danfoss® BD-35F DC compressor and electronic control module, these Powertech portable fridge/freezers keep your food and drinks fresh and cold with superb energy efficiency and reliability. Each model features a digital display control panel to set the fridge temperature from -30° to 30°C, an internal LED light to help illuminate the fridge with minimal power draw, 3-stage low-voltage battery protection, an internal food basket with removable divider and a separate dairy section. The whole body is completely insulated with PU foam to ensure the inside remains nice and cold with minimal compressor run-time, and tough external carry handles double as tie down points. Capable of being powered by either 12-24VDC or 240VAC, they are a fantastic solution for 4WD, camping, caravanning or any other outdoor adventure. We are so confident in these Powertech portable fridge/freezers, we back them with a 5 year components warranty!



GH-1604



GH-1600



- Digital temperature display with adjustable control
- AC or DC power connections
- 3-stage low voltage battery protection
- German Danfoss® BD-35F compressor and electronic control module
- Internal LED light
- Internal basket with removable divider
- Separate dairy section
- Strong carry handles/tie-down points
- Polypropylene construction with PU foam insulation
- Dual mode operation (max & economy)
- High impact Case

ACCESSORIES

INSULATED FRIDGE BAGS TO SUIT

30L GH-1601
40L GH-1603
50L GH-1605



GH-1601

Note: Not available at all stores but can be ordered. Phone ahead.



Specifications	GH-1600	GH-1602	GH-1604
Internal capacity	30L	40L	50L
Input voltage	12/24VDC, 240VAC	12/24VDC, 240VAC	12/24VDC, 240VAC
Temperature range	-30°C - +30°C	-18°C - +10°C	-18°C - +10°C
Refrigerant	R134a	R134a	R134a
Insulation	PU foam	PU foam	PU foam
Avg. current draw	17Ah/day	17Ah/day	17Ah/day
Weight	16kg	17kg	18.5kg
Dimensions (LxWxH)	585 x 350 x 380mm	585 x 350 x 490mm	585 x 350 x 530mm

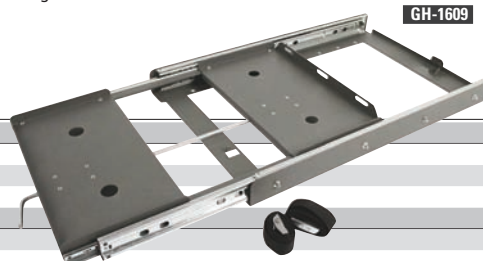
SLIDE DRAWER FOR POWERTECH FRIDGE/FREEZERS

If you're planning to install your Powertech fridge/freezer in the back of your 4WD, installing with one of these slide drawers is a very secure and convenient way to go. Simply bolt the slide drawer base down securely, and then secure down your fridge to the drawer with the supplied tie down straps. The drawer locks in 3 positions, has ball-bearing runners, and can handle up to 100kg load.

- Dimensions: 630(L) x 405(W) x 66(H)mm

GH-1609

POWERTECH



GH-1609

	Cat.	Qty 1+	Qty 3+
30 Litre Fridge/Freezer	GH-1600	\$769.00	
40 Litre Fridge/Freezer	GH-1602	\$829.00	
50 Litre Fridge/Freezer	GH-1604	\$929.00	
Accessories to Suit	Cat.	Qty 1+	Qty 3+
30 Litre Insulated Bag	GH-1601	\$79.95	\$71.95
40 Litre Insulated Bag	GH-1603	\$89.95	\$80.95
50 Litre Insulated Bag	GH-1605	\$94.95	\$85.50
Slide Drawer	GH-1609	\$299.00	\$269.00

PORTABLE FRIDGE/FREEZER

POWERTECH PORTABLE FRIDGE/FREEZER 65L DUAL ZONE

This Powertech 65L dual zone fridge uses a genuine Danfoss® BD50F compressor and control unit, to give you the most reliable and energy efficient portable fridge to ensure you always have your drinks cold, and your food fresh. There are two separate compartments, each with their own independent temperature controls so you can run a separate fridge and freezer compartment, or two separate fridge compartments. You can even shut down one compartment to save power. The main body is constructed with a tough metal exterior finished in industrial grade hammertone paint, with heavy duty steel handles, hinges and latches, and insulation is provided by pressure injected PU foam. For convenience, you can power the fridge by either 12V/24VDC or 240VAC mains, so can be run on battery or park power. We are so confident in this fridge, we back it with a 5 year compressor and 3 year components warranty.

- Digital temperature display and control for each compartment
- AC and DC power connections
- 3-stage low voltage battery protection
- Danfoss® BD50F compressor
- Internal LED lights in both compartments
- Removable baskets
- Metal body construction with PU foam insulation
- Max & Economy operating modes
- Single compartment operating mode
- Replacement DC lead: PP-1982



Specifications	GH-1606
Internal Capacity	65L (39L + 26L)
Input voltage	12/24VDC, 240VAC
Temperature range	-18°C to 10°C
Refrigerant	R134a
Compressor	Danfoss® (SECOP) BD50F
Insulation	PU foam
Avg. Current draw (12VDC, 5°C inside, 20°C outside)	0.89A/hour (approx 22Ah/day)
Weight	29.5kg
Dimensions	790(L) x 465(W) x 495(H)mm

Note: Because of its size, this product is not stocked in stores. Please order online or pre-order at your local store



NEW
2015

POWERTECH



5
YEAR WARRANTY

AUTO & OUTDOORS

↑	Cat.	Qty 1+	Qty 3+
65 Litre Dual Zone Fridge/Freezer	GH-1606	\$1,399.00	
↑ Accessories to Suit	Cat.	Qty 1+	Qty 3+
Insulated Fridge Bag to Suit	GH-1607	\$119.00	\$106.95
Slider Drawer for Powertech Fridge/Freezers	GH-1612	\$369.00	\$335.00

PORTABLE FRIDGE STAND

FOLDING ALUMINIUM FRIDGE STAND

Raise your camping fridge or Ice box off the ground to a more convenient height, and away from dirt, sand and water. Handles up to 150kg, so it will support the Powertech range of fridges.

- Very strong and durable aluminium frame
- Three adjustable height settings
- Folds flat for stowage
- Storage bag included
- Dimensions: 500(L) x 520(W) x 480(H)mm when open



NEW
2015

1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Stand	GH-1608	\$59.95	\$53.95	\$47.20

REPLACEMENT FRIDGE LEADS

REPLACEMENT LEAD FOR PORTABLE FRIDGES

- Suits cigarette and merit sockets

PP-1984

PP-1982

SUITS WAECO FRIDGES
PP-1982

SUITS ENGEL FRIDGES
PP-1984



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.8m	PP-1982	\$19.95	\$17.70	\$15.70
	1.8m	PP-1984	\$19.95	\$17.70	\$15.70

REPLACEMENT POWER LEAD FOR THERMOELECTRIC COOLER/WARMER

A replacement DC power lead to suit most common thermoelectric cooler/warmers which have the notched rectangular shape DC power input.

- Can fit into cigarette or merit sockets
- 1.8m long



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-1986	\$17.95	\$16.10	\$14.35

AIR COMPRESSORS

12VDC AIR COMPRESSORS

Powerful air compressors great for a variety of outdoor activities and emergency situations such as pumping flat car/4x4/truck tyres, inflatable boats, air beds, etc. Both models incorporate automatic thermal cut-out for added protection as well as cleanable air filters to keep the units free from dirt and other contaminants. Includes heavy duty battery clamps for secure connection to your 12V power source and extendable coil hoses for reaching those tricky spots. Each unit has anti-vibration mounting feet to ensure they stay planted to the ground and a foam grip handle. Accessory nozzles for pumping bike tyres, balls, and other inflatables included as well as a black carry bag.

Specifications	MC-7202	MC-7200
Power	12VDC	12VDC
Gauge	150PSI	150PSI
Current	35A	45A
Max pressure	150PSI	150PSI
Power	420W	540W
Max air flow	72L per minute	180L per minute
Hose	10m PA Hose	5m PA Hose
Dimensions	289(L) x 185(H) x 139(W)mm	345(L) x 215(H) x 150(W)mm

1
YEAR WARRANTY



MC-7202

MC-7200

TECH TALK!

How do you know you are getting a good compressor? The real way is to pull the compressor apart and check the piston. A good compressor will have a steel piston in an alloy cylinder, or an alloy piston in a steel lined cylinder. An easier way is to look at the construction of the tyre inflator. Cheap compressors supply a poorly built & flimsy unit. Check ours out.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
72L/Min	MC-7202	\$119.00	\$106.95	\$94.95
180L/Min	MC-7200	\$199.00	\$178.95	\$158.95

METAL DETECTORS

METAL DETECTORS

BEGINNER METAL DETECTOR WITH AUTO TUNE

A great beginner's metal detector! It is very simple and easy to use - it has an auto tune feature with a meter indication to show metal types detected. It is very reliable with its microprocessor control and digital signal processing. The detector has an adjustable length boom and a waterproof search coil making it suitable for use in a variety of landscapes. It is capable of detecting a coin at 100mm deep and responding to all types of metals. It features volume and sensitivity adjustment knobs, audible alert speaker and headphone socket.

- Requires 9V Battery
- Overall length: 780mm
- Search Coil Dimensions: 165(Dia.) x 17(H)mm



Product may vary from the one shown



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2302	\$69.95	\$62.95	\$55.95

4 IN 1 METAL DETECTOR EXPLORERS KIT

A metal detector only does half the job, once the needle starts to flick and the alarm starts to beep, you know you are in for some serious digging. This handy digging set is very light to be carried around and also very tough and durable.

- Includes headphones to connect to your metal detector, a 2-in-1 handheld shovel/rake, a sieve and a carry bag.



Note: Metal detector not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2304	\$49.95	\$44.90	\$39.90

WATERPROOF METAL DETECTOR WITH LCD

Ideal for beachcombing and prospecting as well as finding objects in obscured locations such as long grass, this high grade portable metal detector is suitable for many applications. Capable of detecting a coin at up to 180mm depth it will detect a variety of metals, with three different tones to distinguish dissimilar metals. Operating at a low frequency of 6.6kHz, the detector will only respond to metal objects and ignores the effects of iron ground mineralization, making it more accurate for locating at large depths. Alternatively, the all-metal mode can be switched on to enable any underground metal traces detected and is signalled both optically and acoustically. An extra large waterproof pick-up coil with its intricate two-dimensional helical winding technology enables very fine and precise measurements to be carried out while carrying it comfortably with the arm support.

- Adjustable sensitivity
- Deep target searching
- 3 Operation modes: All metal, Disc, Notch
- Ferrous/Non-ferrous indicators
- Waterproof search coil
- Large LCD
- 3 Tones for different metal indication
- One touch auto ground balance
- Headphone jack
- DSC and GND adjustment
- Arm Support
- 2" Speaker

Specifications	
Power: Requires	2 x 9V batteries
Overall Length	1250mm
Search Coil Dimensions	205(Dia.)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2307	\$159.00	\$142.95	\$126.95

WATERPROOF METAL DETECTION PIN-POINTER WITH VIBRATING ALERT

Don't waste time ploughing around a large area to find the target object, pin-point exactly where your desired metal is before digging. Highly accurate and capable of detecting a coin at up to 30mm depth, it will alert you when you've found your treasure with LED indication and vibration. Easy to carry and waterproof, it is ideal for use in many environments.

- Completely Waterproof
- LED Indicator and Vibrating Alert
- Low Battery Indication
- Power: Requires 1 x 9V Alkaline battery



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2305	\$49.95	\$44.90	\$39.90

LET'S FIND EVERYTHING YOU NEED!

FROM
\$6.95
SB-2916



9V BATTERIES

P323

FROM
\$17.95
ST-3269



SURVIVAL KIT

P272

FROM
\$9.95
ST-3286



HEAD TORCH

P257

FROM
\$9.95
YS-5534



INSECT REEPLER

P271

SCOPES

50X SPOTTING SCOPE WITH SMARTPHONE VIEWING ATTACHMENT

A fantastic addition to the age old invention that is a telescope. Observe the cosmos, wildlife at game parks, or aircraft landing and capture it all on your iPhone® by attaching it to the tele-lens. This kit comes with a traditional telescope, a K25mm eyepiece for viewing the skies above, as well as a 50x tele-lens for attaching to an iPhone 4s/5s® or Samsung Galaxy® S3/S4/S5. Capturing close-up footage of distant objects is now incredibly easy. In a few seconds it could all be uploaded to Facebook, Instagram or your blog. Comes with handy carrying pouch for transporting to your spotting location.

- Supplied with brackets for iPhone® 4s, iPhone® 5, Samsung Galaxy® S3/S4/S5
- F40070 telescope
- Magnification: 12x, 16x, 50x
- K25mm eyepiece
- 50x tele-lens kit
- Light weight tripod
- Carrying pouch included
- Dimensions: 480(L) x 90(Dia)mm



Photo for illustration purposes only



Note: Smartphone not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
50x Spotting Scope	GG-2134	\$259.00	\$235.00	\$209.00

NIGHT VISION MONOCULAR WITH 3 X MAGNIFICATION & IR ILLUMINATION

Price Breakthrough! Up until now we have avoided selling night-vision products because we felt that not only were they expensive but they didn't perform all that well. This unit, however, changes that. Not only is this product relatively low cost, it has 3 x magnification and an infrared illuminator when light levels are extremely low.

- The unit has a focusing ring and attachments for a tripod mount.

Specifications	GG-2129
Type	3 x 42 image intensifier tube
Max range	150-200m (2-10 Lux)
Field view	13°
Eye piece	-4 to +4 diopter
Battery	CR123A included
Battery life	approx 30 hours
Weight	300gms
Accessory	Carry bag
Lens Dia.	42mm
Dimensions	170(L) x 75(H) x 50(Dia.)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
3x Monocular with Night Vision	GG-2129	\$319.00	\$285.00	\$255.00

DIGITAL NIGHT VISION BINOCULARS WITH VIDEO RECORDING

A perfect companion on your outdoor adventures or for night time surveillance. This pair of binoculars has the state of the art design, integrating electronic viewfinder with IR illuminated night vision making it suitable for both day and night spotting. The binoculars have 3x optical magnification and up to 5x digital zoom at a press of a button. Best part of all is you get to record all the sightings onto a microSD card (available separately) so you can playback on a computer or big screen.

Specifications	GG-2135
Aspect ratio	4:3
Aperture	F1.4 with adjustable day and night mode
Visual Distance	Over 100 metres
Luminance	1.5W IR LED
Battery	Requires 8 x AA batteries
Battery Life	Up to 4 hours
Dimensions	190(H) x 150(W) x 60(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
5x Binoculars with Night Vision	GG-2135	\$299.00	\$269.00	\$239.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$1.95
SB-2426



AAA & AA BATTERIES

P323

FROM
\$4.95
SB-2400



CR123A BATTERIES

P325

FROM
\$169.00
QC-8027



STANDALONE CAMERAS

P443

FROM
\$229.00
QC-8030



TIME LAPSE CAMERAS

P445

FIELD CAMERAS & ACCESSORIES

OUTDOOR DVR MONITORING SYSTEM

MOTION ACTIVATED OUTDOOR CAMERA WITH IR FLASH

A weather resistant outdoor camera for a wide range of outdoor applications, including surveillance around the home, office or warehouse, or for wildlife applications. The PIR sensor triggers the 7MP camera for colour photos and videos by day or monochrome photo and videos by night. Night vision is assisted using the bright IR flash, which illuminates objects up to 12 metres away.

Photos and videos up to 90 seconds long are recorded to its 16MB internal memory or an SD Card (up to 32GB, available separately) for more storage. Playback the vision on the integrated 1.5" colour LCD screen while in the field, or by connecting to a PC.

Other features include a fast 1.3sec trigger time, highly sensitive microphone, TV output, and security lock hole for a padlock. Power is provided by 4 x D and 3 x C batteries (batteries required). We recommend Alkaline batteries for longer operation. Supplied with USB and TV cable, mounting strap, lens hood and instruction manual.

Features:

- 3MP camera (up to 7MP Interpolated)
- Adjustable sensitivity (motion sensor)
- 5mm /8mm mixed infrared LED technology for wide and longer illumination
- Fast trigger time 1.3s at turbo mode
- Separate controls for camera and sensor, ideal to instant setup directly
- Time and Date stamp
- Built-in 1.5" TFT screen
- Backlit for Motion control LCD
- Pause time: 0-60 minutes
- Video length: 3-90s for day and night
- 1-3 Quick Shots setting
- 2-5 Burst Shots setting

Specifications	
Video resolution	HD 1280 x 720 at 30fps
Power	4 x D & 3 x C Batteries required
Weight	518gm without batteries
Dimensions	192(H) x 120(W) x 90(D)mm



NEW
2015

**ALSO SEE PAGE 441 FOR OUR
EXTENSIVE RANGE OF WIRED &
WIRELESS CAMERAS/RECORDERS**

IR WIRED FLASH - QC-8042

Gooseneck sensor on the booster is triggered by the cameras built-in flash so both will occur synchronously. Features 36 wide angle IR LEDs and a 2m cable.

- Extension port to 'daisy chain' multiple flash units
- Adjustable illumination angle
- Requires 2 x D Batteries or 3VDC power supply
- Dimensions: 115(H) x 57(W) x 90(D)mm



NEW
LOW
PRICE

IR WIRELESS FLASH - QC-8044

Wireless unit will detect a flash from the main outdoor camera and simultaneously flash to give more IR coverage to the target. The 128 infrared LEDs are invisible to the human eye. Belt mount so it can be attached to a tree or pole.

- Supplied with transmitter with antenna, belt.
- Adjustable illumination angle
- Requires 4 x D Batteries or 6VDC powered
- Dimensions: 145(H) x 100(W) x 70(D)mm



SECURITY BRACKET TO SUIT - QC-8046

Mount your QC-8048 Outdoor Camera securely to a tree using this tough anodised camouflage green bracket. Four mounting holes for screws or cable ties, and keep in place using padlocks (not included).

- Dimensions: 173(L) x 153(W)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Outdoor Camera	QC-8048	\$179.00	\$160.95	\$142.95
IR Wired Flash to suit	QC-8042	\$49.95	\$44.95	\$41.95
IR Wireless Flash to suit	QC-8044	\$129.00	\$115.95	\$109.95
Bracket for QC-8048	QC-8046	\$12.95	\$11.35	\$10.95

WARNING

Warning: These cameras should not be placed in areas where there is an expectation of privacy. Such places typically are: bathrooms, bedrooms, toilets, dressing rooms etc.. Use of these devices in such locations, can lead to criminal prosecution and severe penalties.

720P OUTDOOR CAMERA WITH SOLAR PANEL

A motion triggered outdoor camera to record photos or HD videos of wildlife or intruders. This camera is equipped with a solar panel to allow continuous operation without the need to worry about battery levels. Camera is secured in a rugged housing suitable for mounting virtually anywhere. The built-in 48 infrared LEDs provide night time illumination up to 20m and are invisible to the human eye. It can also be setup as a time-lapse recorder with status shown on the built-in LCD display.

- Time Lapse programming
- Status LCD display
- Built-in PIR with 20m range
- Infrared LEDs with 20m range
- AV Output for video & photo playback

Specifications	
IP Rating	IP65
Image Sensor	5MP (interpolated up to 12MP), 50 degrees
Video Resolution	1280 x 720 at 30fps
Video Format	MJPEG (Colour by day, B&W by night)
External Memory	UP to 32GB SD Card (not included)
Dimensions	165(H) x 140(W) x 60(D)mm



NEW
2015

1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8049	\$279.00	\$255.00	\$239.00

CUSTOMERS PLEASE NOTE! TECHSTORE SPECIALS

SUPER BARGAINS ONLY AVAILABLE THROUGH TECHSTORE

Many of you who see our regular ads have made personal visits for some products not available to shop customers. These products are usually in such short supply there is simply not enough to distribute to all stores. Indeed some items could be as few as half a dozen. Such goods are sold through our "TECHSTORE".

When we advertise these products, we box them in a special section marked off with 'TECHSTORE ONLY - NOT AVAILABLE IN RETAIL STORES'. Unfortunately many do not notice this and become angry when the product is not in their local store. Please do not blame the local manager for this, he has no control, nor can he transfer stock from the TECHSTORE to his shop for you. If you wish to buy these items you must hurry and order direct to the TECHSTORE.

MORE INFO
WEB

UHF TRANSCEIVERS (CB RADIOS)

0.5W UHF TRANSCEIVER - 80 CHANNEL

Keeps you clearly in touch with the kids at up to 3km range. Perfect for camping, picnics in the bush, skiing and hiking trips, it also features an integrated LED torch so you can find your way home in the dark. Requires 3 x AAA batteries.

- Integrated Blue LED Torch
- Up to 3km range
- 80 channels
- Push to Talk (PTT) function
- Electronic volume control
- Scan channel, call tone and monitor functions.
- Low battery alert
- Duplex function
- Dimensions: 122(H) x 54(W) x 35(D)mm



↑		Cat.	Qty 1+	Qty 5+	Qty 10+
Each	0.5W	DC-1001	\$29.95	\$26.90	\$23.70

0.5W UHF CB RADIO TWIN PACK - 80 CHANNEL

Two pack of mini UHF CB radios with up to 3km range. Ideal for keeping in touch with the kids at campsites, picnics, skiing and hiking trips. They retain many of the features and build quality of more expensive units but come in a child friendly package. Also features a built-in LED torch to find your way in the dark.

- Up to 3km range
- 80 Channels
- Push to Talk (PTT) function
- Electronic volume control
- Scan channel, call tone and monitor functions
- Integrated Blue LED Torch
- Low battery alert
- Duplex range extender
- Requires 3 x AAA batteries per unit
- Dimensions: 55(W) x 110(H) x 35(D)mm

Supplied as a pair in red & blue



↑		Cat.	Qty 1+	Qty 5+	Qty 10+
Pair	0.5W	DC-1017	\$49.95	\$44.90	\$39.90

0.5W UHF TRANSCEIVER - 80 CHANNEL - RECHARGEABLE

Out in the bush and you need to read a map in the dark? No problem! Your CB has an LED torch built in to it. Naturally it does all the normal CB functions as well and includes desktop charging cradle, AC adaptor, two transceivers and batteries.

- Power output: 0.5W
- Up to 3km range
- Up to 30 hours battery life
- Charging time: 6 hours
- 80 channels
- PTT function
- Scan function
- Auto squelch



↑		Cat.	Qty 1+	Qty 5+	Qty 10+
Pair with Charger	0.5W	DC-1009	\$74.95	\$67.50	\$59.95

0.5W UHF TRANSCEIVERS - 80 CHANNEL - PAIR

Everything you need for mobile CB communications. 80 channel UHF CB radios complete with rechargeable batteries, dual charger cradle and a range of accessories. They have 0.5 watt output for up to 5km transmission range and CTCSS function. Ideal for bushwalking, camping, sports, etc.

- Sold as a pair
- No license required
- 80 channels and 38 sub-channels
- Babysitter and parent-monitor
- VOX function
- Auto power off
- Stop watch
- Repeater function
- Automatic squelch
- Battery level indicators
- Key lock function
- Key tone function
- Backlit LCD
- Supports external headset
- Supports external AC-DC charger



↑		Cat.	Qty 1+	Qty 5+	Qty 10+
Pair with Charger	0.5W	DC-1027	\$109.00	\$89.95	\$79.95
Spare Rechargeable Battery		DC-1029	\$14.95	\$13.35	\$11.70
Cigarette Lighter Charger		DC-1036	\$17.95	\$15.95	\$14.35
Mains Charger		DC-1034	\$17.95	\$15.95	\$14.35
Leather Pouch		DC-1018	\$6.95	\$6.25	\$5.50

LET'S FIND EVERYTHING YOU NEED!

VOX HEADSET & MICROPHONE FOR TRANSCEIVERS

Handy VOX headset for use with a variety of our transceivers. Features a clip for securing to your clothes.

Suitable for the following transceivers:
DC-1021, DC-1027, DC-1049,
DC-1065 & DC-1096

- Standard 3.5mm plug.
- Cable length: 1m

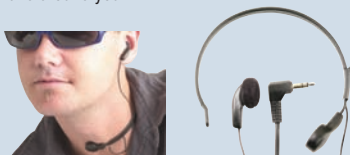


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1056	\$14.95	\$13.35	\$11.70

HANDS FREE EARPIECE WITH THROAT MICROPHONE

The hands free fits snugly in your ear and around your neck blocking out virtually all background noise.

- Cable: 104.5cm long cable
- Suits DC-1021/27/49



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1039	\$22.95	\$20.35	\$18.35

AIR TUBE HEADSET FOR HANDHELD CB RADIOS

Ideal for people who use CB radios for extended periods of time because the air tube is much lighter and more comfortable than standard earpiece headsets. The collar clip secures the tube without inhibiting head movement and the in-line microphone features a push to talk button and mounting clip.

Compatible with handheld UHF CB radios which feature a 3.5mm combination microphone and earpiece plug including many from the range of Digitech handheld radios.

- Compatible Digitech Radios: DC-1021, DC-1027, DC-1049, DC-1065
- Length from CB plug to microphone: 900mm
- Length from microphone to collar clasp: 550mm
- Air Tube Length: 250mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-1031	\$39.95	\$35.90	\$31.90

UHF TRANSCEIVERS (CB RADIOS) (CONTINUED)

2 WATT UHF TRANSCEIVER WITH CTCSS - 80 CHANNEL ADVANCED

With 2 watts of output power, this UHF transceiver is certainly no toy. This top quality unit will suit many professional and leisure activities with a range of up to 10km line-of-sight. You can save battery power by switching to the low setting (500mW) for local communications (such as around the campsite). It's loaded with all the features you would expect from an advanced system like CTCSS that reduces interference from other users on the same channel, 75 voice channels, plus it has a rechargeable Li-ion battery with a plug pack charger.

- CTCSS function
- Hi/Lo power output
- Dual watch/vox function
- Key lock/tone function
- Optional 12V charging (cable not included)
- Auto squelch function
- Low battery display
- Backlit LCD
- Roger tone
- Li-ion rechargeable battery
- Stop watch
- Dimensions: 120(L) x 57(W) x 35(H)mm



↑			Cat.	Qty 1 +	Qty 5 +	Qty 10 +
	Transceiver - Each	2W	DC-1049	\$79.95	\$71.95	\$63.95
	In-dash Car Charger		DC-1035	\$17.95	\$15.95	\$14.35
	Speaker Mic		DC-1062	\$24.95	\$22.35	\$19.70
	Spare Battery		DC-1048	\$29.95	\$26.90	\$23.70
	Leather Pouch		DC-1042	\$9.95	\$8.75	\$7.75

3W WATERPROOF FLOATING UHF TRANSCEIVER - 80 CHANNEL

A robust floating transceiver suitable for professional or recreational use. A 10km line-of-sight range will allow you to keep in contact over large distances and IP67 rating means it can be submerged in up to 1m of water. Battery power can be conserved by switching to the low setting (500mW) for local communications around base camp. Includes a rechargeable Li-ion battery with a charging cradle and power supply. There are 75 voice channels and the CTCSS system reduces interference from users on other channels. Great for camping, off-road race crews, roadies, people who work at large sporting venues, and more.

- IP67 rated
- CTCSS function
- Hi/Lo power output
- Auto squelch function
- Low battery display
- Backlit LCD
- Roger tone
- Li-ion rechargeable battery
- Stop watch
- Dimensions: 120(L) x 57(W) x 35(H)mm



↑		Cat.	Qty 1 +	Qty 5 +	Qty 10 +	
	UHF - Each	3W	DC-1074	\$129.00	\$115.95	\$102.95
	Spare Battery NEW		DC-1075	\$19.95	\$17.95	\$15.70

3W UHF TRANSCEIVER TRADIES PACK

Keep in touch at the worksite, large venue or on the convoy with this handy tradies pack. The floating transceivers included in this pack are suitable for professional or recreational use. A 10km line-of-sight range will allow you to keep in contact over large distances and IP67 rating means it can be submerged in up to 1m of water - and they float! Includes voice operated speaker/mics so you can talk hand's free. Charge on the go with the in-car charger.

- Pack includes:
- 2 x 3W Waterproof Floating UHF Transceiver with 80 channels
 - 2 x Mini Speakers/Microphones
 - 2 x 12V cigarette lighter charger
 - 2 x VOX Headset and Microphone for Transceivers
 - 1 x Dual charging cradle with mains supply
 - Transceiver dimensions: 400(L) x 280(W) x 100(H)mm



Case may vary from the one shown



↑		Cat.	Qty 1 +	Qty 5 +	Qty 10 +	
	Tradies Pack	3W	DC-1076	\$329.00	\$299.00	\$265.00

5W UHF TRANSCEIVER - 80 CHANNEL HIGH POWERED

Remarkable range and clarity. With a powerful 5W output you'll be able to communicate far beyond consumer grade models. For short range banter, you can switch to power-saving 1W output so you can recharge later rather than sooner. Other features include 80 channels with CTCSS, channel scan, VOX and repeater functions. Includes Li-Ion rechargeable battery pack, AC adaptor, charging cradle and belt clip.

- Range: 3km/20km
- 1W/5W switchable output power
- 80 channels
- CTCSS sub channel calling
- LCD backlit display
- Dual watch
- VOX function
- Repeater function
- Detachable antenna
- Key lock function
- Channel scan function
- Auto power saver mode
- Dimensions (without antenna): 130(L) x 60(W) x 35(D)mm
- Antenna: 165mm long



Thousands Sold



↑		Cat.	Qty 1 +	Qty 5 +	Qty 10 +		
	UHF - Each	5W	DC-1065	\$159.00	\$142.95	\$126.95	
	Cigarette Lighter Charger		DC-1099	\$17.95	\$15.95	\$14.35	
	Speaker Mic		DC-1062	\$24.95	\$22.35	\$19.70	
	Leather Case		DC-1067	\$9.95	\$8.75	\$7.75	

UHF TRANSCEIVERS (CB RADIOS) (CONTINUED)

5W UHF CB RADIO - 80 CHANNELS COMPACT - IN-DASH

Fixed installation UHF transceivers in your vehicle are always a better option as you get range and power. You'll always be connected to a higher gain antenna with a ground plane and you can always get more transmitting power as you aren't restricted to small batteries that hand-held units typically have. All the usual UHF CB features, such as channel scan, repeater access and CTCSS. Includes handheld microphone with push to talk and channel change buttons. Ideal as a vehicle unit for 4WD etc.

- 80 channel
- Signal strength meter
- Up to 20km range line-of-sight
- Compact size for under-dash mounting
- Mic and lead included
- Mounting bracket included

CB RADIO AND ANTENNA BUNDLE - DC-1121

CB Radio and antenna bundle that combines our Compact 5W UHF CB Radio (DC-1120) and UHF 5dBi Fibreglass Antenna with 5m Cable (DC-3078)

PLASTIC MICROPHONE BRACKET

Microphone bracket clip to suit DC-1120 UHF handset. The back plate features mounting holes for screwing it in and is flat enough to use double sided adhesive tape. Stainless steel mounting screws included.

- Dimensions: 33mm x 36mm

Replacement microphone not stocked in all stores but can be ordered



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
5W UHF Radio	DC-1120	\$189.00	\$169.95	\$150.95
5W UHF Radio + Antenna	DC-1121	\$249.00		
Mic Bracket Clip	DC-3080	\$5.95	\$5.25	\$4.75
Replacement Microphone	DC-1124	\$24.95	\$22.50	\$19.95

5W UHF CB RADIO - 80 CHANNELS COMPACT

Featuring special full-feature microphone. This unit allows you to remotely locate the transmit/receive base unit and only have the microphone itself within easy reach. All functions for the unit are on the face of the microphone, there are no controls on the power unit at all. The microphone has a speaker in it, which enables you to completely control the transceiver from this unit. Its shows:

- 80 Channels
- Channel No. and frequency
- Signal strength and power meter (S/Rf)
- CTCSS status (38 codes)
- DCS status (104 codes)
- Scanning status
- Power On/Off
- Dimensions: 100(W) x 95(D) x 24(H)mm (base unit)

SEE PAGE 282 FOR A FASCINATING BOOK ON THE ROLE OF WIRELESS IN WARFARE FROM A HISTORICAL PERSPECTIVE, INCLUDING WIRELESS IN AUSTRALIA'S INVOLVEMENT WITH VIETNAM



It can also change to 7 backlit colours in 3 brightness levels. A thoroughly modern design.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
5W UHF Radio	DC-1122	\$249.00	\$225.00	\$198.95

UHF ANTENNAS & ACCESSORIES

UHF 4.5DB BLACK WHIP

Offers at least 4.5dB gain.

- Black powder coated
- Stainless steel whip
- Length 565mm.
- Suits standard UHF 5/16" base Cat. DC-3062

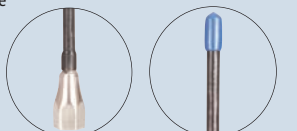


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
4.5dB	DC-3074	\$22.95	\$20.35	\$18.35

EXTERNAL UHF ANTENNA

For use with our external antenna base (DC-3066) or any other antenna base with suitable connecting thread.

- Operating Frequency: 477MHz
- Gain: 5-6dBi
- Impedance: 50Ohm
- Length: 650mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
5-6dB	DC-3076	\$19.95	\$17.70	\$15.70

PLASTIC MICROPHONE BRACKET

Microphone bracket clip to suit DC-1120 UHF handset. The back plate features mounting holes for screwing it in and is flat enough to use double sided adhesive tape. Stainless steel mounting screws included.

- Dimensions: 33mm x 36mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3080	\$5.95	\$5.25	\$4.75

UHF EXTERNAL ANTENNA BASE WITH CABLE

Designed for use with our fixed installation transceiver unit (DC-1120) to enable you to connect an antenna. The antenna base can be mounted to a bracket and the PL259 plug will connect to the UHF unit.

- PL259 connection: 17(Dia.)mm
- RG58 Coax Cable
- Antenna base dimensions: 44(Dia.) x 40(H)mm
- Cable length: 4500mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3066	\$24.95	\$22.35	\$19.70

LET'S FIND EVERYTHING YOU NEED!

FROM
\$1.45
WB-2010



50Ω COAX

P209

FROM
\$2.95
PP-0680



PL259 PLUGS

P203

FROM
\$6.95
PA-3652



PL259 ADAPTORS

P205

FROM
\$12.95
NM-2828



COAX SEAL TAPE

P30

UHF ANTENNAS & ACCESSORIES

UHF 3 & 6DBI PREMIUM ANTENNA KIT

Robust and durable antennas for UHF communications. Independent ground plane to ensure stable radiation pattern in all mobile mounting applications. Two models to choose from. Each feature 5m pre-terminated cables with FME socket and PL259 adaptor so no tools are required.

4DBI FLEXIBLE UHF ANTENNA

- 407mm long
- Includes 'L' guard mount bracket

Specifications	DC-3071
Frequency	476.42 - 477.40MHz
Gain	3dB, 6.5dB* (* Reference to 1/4 waves mounted on centre of Vehicle Roof)
VSWR	<1.5:1
Impedance	50 Ohms
Polarization	Vertical
Radiation	Omni Directional
Cable	LL195 Low loss, 5m length
Termination	FME socket + UHF plug to FME plug adaptor
Base Materials	Stainless Steel Brass
Antenna Length	
3dBi	450mm
6dBi	900mm

PREMIUM UHF ANTENNA WITH 3DBI & 6.5DBI ANTENNAS

- Features stainless spring & elevated feed base
- 450mm (3dBi) and 900mm (6.5dBi) long
- Includes 'L' guard mount bracket and bull bar bracket DC-3071.

Specifications	DC-3073
Frequency	476 - 477MHz
Gain	4dBi
Input impedance	50 Ohms
Radiation pattern	Omni directional
Antenna materials	Brass & flexible polypropylene radome
Antenna weight	190g
Cable	LL195 Low loss, 5m Length
Termination	FME socket + UHF plug to FME plug adaptor
Antenna length	407mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
3dBi & 6.5dBi	DC-3071	\$119.00	\$106.95	\$94.95
4dBi	DC-3073	\$64.95	\$58.50	\$52.50

UHF 5DBI FIBREGLASS ANTENNA WITH 5M CABLE

Another addition to our antenna range. This model is suitable for cars and trucks using UHF transceivers. The antenna is fibreglass and it features a tough flexible spring base to absorb and deaden the vibrations associated with driving.

Specifications	
Frequency	477MHz for UHF
Cable connector	FME
Gain	5dBi
Length	630mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
	DC-3078	\$99.95	\$89.95	\$79.95

TRUNK GROOVE BRACKET - Z SHAPE

Polished stainless steel bracket in a Z shape to mount an antenna on the vehicle boot or bonnet.

Specifications	
Antenna mounting	16mm
Mounting holes	4 x 4.6mm
Cable entry	5.5mm
Back plate	52(W) x 57(H)mm



	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3075	\$8.95	\$7.95	\$6.95

RIGHT ANGLE BULL BAR BRACKET STAINLESS STEEL

This stainless steel bracket will allow you to attach an antenna to your vehicles bull bar to improve reception to your UHF radio. For those who frequently work or travel to remote areas this is ideal.

- Dimensions of L bracket: 56 x 57 x 54mm
- Length of U brackets 72mm
- Material: 304 Grade Stainless steel



	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3077	\$14.95	\$13.35	\$11.70

UHF BASE

Constructed from UV stable polypropylene and a 5/16", 26TPI plated brass bolt.

	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3062	\$12.95	\$11.35	\$10.35



UNIVERSAL CB BASE

Standard 5/16" 26TPI low profile base complete with solder lugs for cable connection.

	Cat.	Qty 1+	Qty 5+	Qty 10+
	DC-3060	\$10.95	\$9.75	\$8.75



27MHZ HELICAL WHIP

High performance helical fibreglass mobile whips designed and manufactured in Australia to suit our rugged conditions. All with standard 5/16" 26TPI thread.

	Cat.	Qty 1+	Qty 4+	Qty 10+
900mm	DC-2030	\$16.75	\$14.95	\$13.35



BOOK

WIRELESS AT WAR BOOK

The existence of electromagnetic radiation was first demonstrated in 1885 by Heinrich Hertz. After 1900 the potential advantages of wireless technology to the battlefield and for marine warfare became known, interested industrial organisations multiplied, keeping pace with the growth of the armies and navies. This book features 250 photos and diagrams and tracks the use of wireless technology in war from its inception all the way up to more recent conflicts in Afghanistan. Special reference is made to military communications used by the Australian Army, especially WWII and Vietnam.

Softcover 352 pages. 225 x 150mm



	Cat.	Qty 1+
	BM-2490	\$29.95

LET'S FIND EVERYTHING YOU NEED!

FROM
\$29.95
WH-5521



HEATSHRINK PACK

P215

FROM
\$1.85
HP-1200



CABLE TIES

P218

FROM
\$9.95
HP-1235



DUNE TUBE

P218

FROM
\$24.95
NA-2829



RESCUE TAPE

P216

VHF TRANSCEIVERS

3W VHF MARINE WATERPROOF FLOATING TRANSCEIVER

A VHF radio on a boat is a must have. You never know when your boat may be rendered inoperative by engine malfunction, a storm, rogue waves, or a monster from the deep. This transceiver will give you coverage of all international VHF marine channels so you can call for help when needed or communicate with other boats. This unit is fully submersible so if you find your boat has been capsized and you are stuck under the hull you know you'll be still be able to call for help. Includes a Li-ion rechargeable battery pack, AC adaptor, charging cradle and belt clip.

- IP67 rated
- 1/3W Switchable output power
- Backlit LCD
- Dual and triple watch function
- Channel scan function
- One-touch emergency channel 16
- Auto power saver mode
- Dimensions: 130(L) x 60(W) x 35(D)mm



It Floats



↑	Cat.	Qty 1 +	Qty 5 +	Qty 10 +	
	3W VHF Marine - Each	DC-1093	\$129.00	\$115.95	\$102.95
	Spare Battery Pack	DC-1075	\$19.95	\$17.95	\$15.70

5W VHF MARINE RADIO TRANSCEIVER

This powerful 5W hand-held transceiver gives you coverage of all international VHF marine channels. Though not completely submersible, the housing is compact and splash proof, specially designed to endure the usual rigours of boating. The antenna is detachable so units can be connected to a larger antenna mounted on a boat. Includes Li-ion rechargeable battery pack, AC adaptor, charging cradle and belt clip.

- 1W/5W switchable output power
- Backlit LCD
- Dual and triple watch function
- Channel scan function
- One-touch emergency channel 16
- Auto power saver mode

12V CAR CHARGER TO SUIT DC-1065/DC-1096


Standard cigarette lighter socket to DC plug. Suitable for charging transceiver models DC-1065 and DC-1096.

- Cable length: 1.2m



DC-1099



↑	Cat.	Qty 1 +	Qty 5 +	Qty 10 +	
5W VHF Marine Each	DC-1096	\$149.00	\$133.95	\$118.95	
↑ Accessories to Suit	Cat.	Qty 1 +	Qty 5 +	Qty 10 +	
Cigarette Lighter Charger	DC-1099	\$17.95	\$15.95	\$14.35	
Spare Battery Pack	DC-1066	\$24.95	\$22.35	\$19.70	
Speaker Mic	DC-1062	\$24.95	\$22.35	\$19.70	
Leather Pouch NEW	DC-1067	\$9.95	\$8.75	\$7.75	

CAR ANTENNAS & ACCESSORIES

STANDARD LOCKDOWN

- 4 section
- Extends to 770mm
- Cable length 1.2 metre

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-3250	\$8.95	\$7.95	\$6.95



RUBBER TOPMOUNT

- Small rubber antenna bends when it hits something.
- Good for 4WDs etc.
- 1 section
- Length 350mm
- Cable length 1.2 metre.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-3260	\$18.00	\$15.95	\$14.35

AR-3250

AR-3260

CAR AERIAL EXTENSION

Need a longer aerial lead in your car?

- Standard aerial socket to plug.
- Length: 3 metre

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
3m	AR-3253	\$8.95	\$7.95	\$6.95



CAR RADIO ANTENNA LINE PLUG

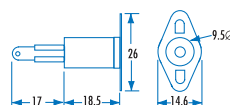
- Solder type.
- Standard antenna plug

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PP-2040	\$1.65	\$1.45	\$1.30



CAR RADIO SOCKET CHASSIS MOUNT

- Nickel plated



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-2042	\$1.95	\$1.75	\$1.55

CAR RADIO ANTENNA LINE PLUGS

SOLDERLESS CAR RADIO

ANTENNA LINE PLUG

Replacement or connector for new antenna installation.

PP-2044



CAR RADIO ANTENNA LINE PLUG

- Solder type with plastic strain relief.

PP-2041



⬆	Cat.	Qty 1 +	Qty 4 +	Qty 10 +	
	Solderless	PP-2044	\$2.95	\$2.60	\$2.30
	Solder type	PP-2041	\$2.50	\$2.21	\$1.95

SOLDERLESS CAR RADIO INLINE SOCKET

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-2046	\$3.95	\$3.45	\$3.15



CAR RADIO ANTENNA ADAPTOR PLUG

Converts Motorola to European style antenna sockets.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-2048	\$4.95	\$4.45	\$3.90



CAR RADIO ANTENNA ADAPTOR PLUG

Converts European style antenna plug to Motorola style antenna plug.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-2038	\$4.95	\$4.45	\$3.90



FOLDING SOLAR POWER

PORTABLE SOLAR PANELS - PORTABLE POWER

We are all fully aware of the benefits of rooftop solar power in our houses. You may not realise, however, that the massive price reductions, increased efficiency and convenience of folding and flexible panels make solar power on the road or boat a serious proposition!

PORTABLE FOLD-UP SOLAR PANEL KITS

A convenient alternative energy solution for those on the move. Fold it away and store it in the carry bag when not in use, then when you set up camp just fold it out so your batteries are being charged. A stand is included so you can position the panel for optimum solar capture. Features 10m output lead with Anderson® connectors, alligator or eye terminal connections, has the charge controller included so you can connect directly to your battery without fear of over-charging, and is supplied with a durable nylon carry bag. Excellent for camping, 4WD, boating etc.

Supplied with PWM 3-Stage Solar Controller

* 25 year warranty for electrical output, and 12 months for construction and electronics.

Specifications	ZM-9130	ZM-9134
Pmax	80W	120W
Rated voltage	12VDC	12VDC
Voltage at pmax	17.3V	18V
Current at pmax	4.64A	6.67A
Open circuit voltage	21.5V	22.5V
Short circuit current	5.1A	7.4A
Weight	10.5kg	13.0kg
Dimensions		
Open	1090(W) x 623(H) x 36(D)mm	1090(W) x 835(H) x 36(D)mm
Folded	545(L) x 623(W) x 73(D)mm	545(W) x 835(H) x 73(D)mm

*Replacement Solar Charge Controller also available. Not stocked in all stores but can be ordered.

↑		Cat.	Qty 1+	Qty 2+	Qty 4+
12VDC	80W	ZM-9130	\$399.00	\$379.00	\$359.00
12VDC	120W	ZM-9134	\$499.00	\$475.00	\$449.00
	Replacement Solar Charge Controller*	MP-3721	\$59.95	\$53.95	\$47.90

180W PORTABLE FOLD-UP SOLAR PANEL KIT

A convenient alternative energy solution for those on the move - no longer do you need to park in the sun because your solar panels are mounted to the roof of your caravan or camper! Simply fold the panels away and store them in the carry bag when not in use, then when you set up camp just fold it out in the sunlight to provide power to charge your batteries, whilst your caravan/camper can be parked in the shade. Strong stands are built into the frame to tilt the panels to a 30° angle for optimal solar capture. Features a 10m output lead (5m fixed + 5m extension) with 50A Anderson® connectors, heavy duty steel hinges and carry handle, and supplied with a tough nylon carry bag. Note: A charge controller is required - we recommend MP-3129 or MP-3735.

Two high efficiency 12V 90W monocrystalline solar panels to give 180W of power

- Heavy duty metal hinges, latches and carry handle
- Durable protective padded nylon carry bag
- Plastic protective corners
- Waterproof wiring junction boxes
- 10m output lead (5m fixed + 5m extension), with 50A Anderson® plugs
- Requires 20A Solar charge controller, recommended MP-3129 or MP-3735

Specifications	ZM-9136
Power (Pmax)	180W
Rated voltage	12VDC
Voltage at Pmax	18V
Current at Pmax	10A
Weight	19kg
Dimensions (open)	1074(W) x 1195(H) x 38(D)mm
Dimensions (folded)	535(W) x 1195(H) x 76(D)mm



FOR RANGE OF FLEXIBLE SOLAR PANELS
36W, 72W & 108W, SEE PAGE 285, 357

↑		Cat.	Qty 1+	Qty 2+	Qty 4+
12VDC	180W	ZM-9136	\$649.00	\$615.00	\$585.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$16.95
PT-4448



HIGH CURRENT LEADS P291

FROM
\$135.00
SB-1698



DEEP CYCLE BATTERIES P310

FROM
\$699.00
MG-4501



INVERTER GENERATOR P311

FROM
\$79.95
MS-6170



POWER METERS P307

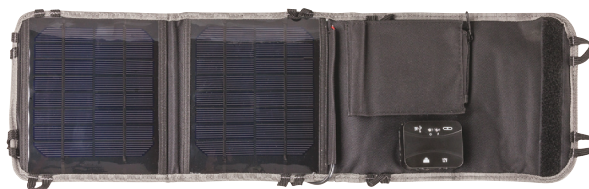
PORTABLE SOLAR PANELS - PORTABLE POWER (CONTINUED)

12VDC 5W SOLAR FOLDING BAG CHARGER

Charge your gadgets on the go. This handy solar panel is lightweight, portable and easily folds up into a carry bag for your to take on your camping trip or off-road adventure. Features an in-built charge controller with 12V output to charge your 12V battery and a USB port for charging Smartphones, Tablets or other USB powered devices. If you require more power, then there is a combination adaptor which allows you to connect up to 3 panels together in parallel. Stitched in loops allow you to easily hang on to a backpack or tent roof.

- Power: 12VDC 5W (400mA max)
- Output Voltage: 5/12VDC
- Dimensions: 190(L) folded - 610(L)mm extended x 175(H) x 42(D)mm

Folded



YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12VDC 5W	MB-3649	\$69.95	\$62.95	\$55.95

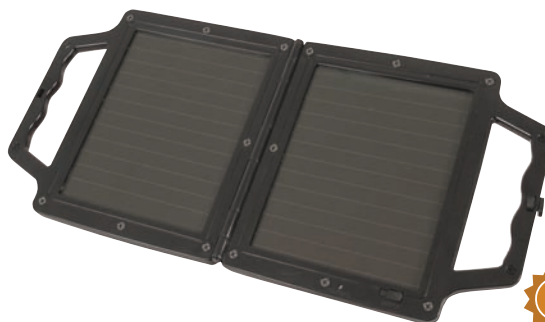
BRIEFCASE AMORPHOUS SOLAR CHARGERS

Convenient briefcase sized solar chargers for keeping a car battery topped up while on holidays or in storage. Two sizes for medium and large cars or 4WDs. Each terminates in a cigarette lighter plug or alligator clips.

12VDC 4W Charger Cat ZM-9037

12VDC 7W Charger Cat ZM-9038

Specifications	ZM-9037	ZM-9038
Pmax	4W	7W
Voltage(max)	18VDC	18VDC
Current(max)	220mA	388mA
Dimensions		
Closed	237(L) x 229(W) x 34(H)mm	335(L) x 250(W) x 36(H)mm
Open	445(L) x 237(W) x 17(H)mm	492(L) x 335(W) x 18(H)mm



YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12VDC 4W	ZM-9037	\$34.95	\$31.45	\$27.90
12VDC 7W	ZM-9038	\$64.95	\$58.50	\$51.95

FLEXIBLE SOLAR PANELS

ULTRA-LIGHT FLEXIBLE FOLD-UP CANVAS SOLAR PANELS WITH CIGS TECHNOLOGY

An affordable range of ultra-lightweight solar panels that fold-up into a very small lightweight package while you travel, and flexible to avoid accidental breakage. Each use high grade flexible thin-film CIGS (Copper Indium Gallium Selenide) solar cells incorporated into a tough canvas fabric blanket, which can be folded up into a small package and neatly stored in the back of your vehicle. The construction is designed to withstand the harsh outback and the abuse of life on the road, so standing on them, driving over them, or bending them isn't going to kill them, and nor will dragging them through sand/mud/dirt. Just unfold them, place in direct sunlight, and enjoy the free power. An external solar charge controller is required to properly charge a 12V battery (Powertech MP-3720 is recommended).

- Flexible design for maximum durability
- 5m output lead
- Super compact and light weight
- High efficiency cells (12.5%), better than amorphous
- Tough canvas material construction
- 15 year output warranty, 2 year construction
- CIGS (copper indium gallium selenide) flexible solar cells



NEW
2015

Specifications	ZM-9160	ZM-9162	ZM-9164
Power (max)	36W	72W	108W
Voltage (max power)	19.8VDC	19.8VDC	19.8VDC
Current (max power)	1.82A	3.63A	5.45A
Open circuit voltage	22.75V	23V	23V
Short circuit current	2.09A	4.1A	6.27A
Solar cell type	Thin Film Flexible CIGS	Thin Film Flexible CIGS	Thin Film Flexible CIGS
Cell efficiency	12.50%	12.50%	12.50%
Weight	1kg	1.8kg	2.7kg
Dimension (folded)	320 x 215 x 50mm	375 x 340 x 50mm	445 x 370 x 45mm
Dimension (unfolded)	780 x 630 x 1.5mm	1120 x 725 x 1.5mm	1310 x 890 x 1.5mm



YEAR WARRANTY

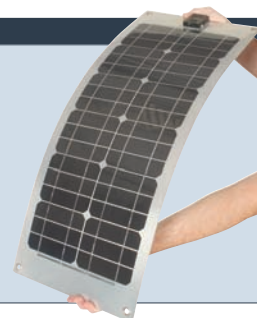
↑	Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
	12VDC	36W	ZM-9160	\$539.00	\$509.00	\$485.00
	12VDC	72W	ZM-9162	\$949.00	\$899.00	\$855.00
	12VDC	108W	ZM-9164	\$1,399.00	\$1,329.00	\$1,259.00

TECH TALK!

APPLICATION GUIDE FOR SEMI-FLEXIBLE SOLAR PANELS

Our semi-flexible solar panels are an excellent option for boats, campervans, caravans or camping power setups, as they are a lot lighter and less bulky than their standard solar panel equivalent (only 3mm thick versus 27-35mm thick). Their main structure is a sheet of aluminium alloy material that is flexible, allowing you to bend the

panel slightly to follow the curves of your mounting surface for a slimline installation. They are also supplied with a set of nylon "threaded inserts" (aka Nutserts), which are a very handy way of providing a threaded hole in your mounting surface.



PORTABLE SOLAR POWER PACKAGES

RECREATIONAL SOLAR PACKAGE DEALS

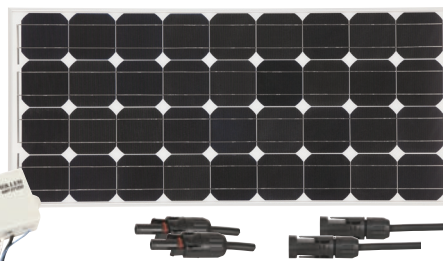
A range of affordable DIY solar package deals from small entry level for light weight camping to a serious system to provide sufficient power for your off-road or boating get-away. Most of the packages come with everything needed to set up the complete power system with minimum wiring. See individual components for full details and warranty information in the Power section.

8 recreational solar package deals to choose from:

80 Watt Fixed Solar Standard Package

Includes:

- 1 x 80W monocrystalline solar panel Cat ZM-9097
- 1 x 12V 8A charge controller Cat MP-3720
- 2 x female PV connector Cat PS-5100
- 2 x male PV connector Cat PP-5102



Note: See individual products for warranty details.

↑ Voltage	Watts	Type	Cat.	Qty 1+
12V	80W	Fixed	ZM-9300	\$290.00

80 Watt Fixed Solar Panel Package

Intended for fixed installations with the solar panel mounted on a roof or deck. Suitable for caravans, small boats, motorhomes, etc. Ideal to power LED lighting and 12V fridge/freezer. Solar panel mounting hardware, PC cable and crimping tool available separately.

- 1 x 12V 80W Powertech Monocrystalline Solar Panel Cat ZM-9097
- 1 x 12V 8A Water Resistant PWM Solar Charge Controller Cat MP-3720
- 1 x Battery Box with Power Accessories Cat HB-8500
- 1 x 12V 100Ah Deep Cycle Gel Battery Cat SB-1695
- 1 x Flexible LED Strip Light with Hook & Loop Backing Cat ST-3950
- 1 x Waterproof Solar Power "PV" Connector 4mm Female Cat PS-5100
- 1 x Waterproof Solar Power "PV" Connector 4mm Male Cat PP-5102



NEW
2015

Note: See individual products for warranty details.

↑ Voltage	Watts	Type	Cat.	Qty 1+
12V	80W	Fixed	ZM-9310	\$889.00

80 Watt Folding Solar Panel Package

For portable applications, including camping, to power a 12V fridge/freezer, LED lighting, etc. Position the folding solar panel to get the most sunlight.

- 1 x 12V 80W Portable Fold-Up Solar Panel Cat ZM-9130
- 1 x Battery Box with Power Accessories Cat HB-8500
- 1 x SB-1695 12V 100Ah Deep Cycle Gel Battery Cat SB-1695
- 1 x Flexible LED Strip Light with Hook & Loop Backing Cat ST-3950



NEW
2015

Note: See individual products for warranty details.

↑ Voltage	Watts	Type	Cat.	Qty 1+
12V	80W	Folding	ZM-9312	\$969.00

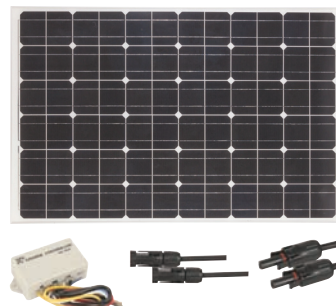
145 Watt Fixed Solar Panel Package

Includes:

- 1 x 145W monocrystalline solar panel Cat ZM-9087
- 1 x 12V 8A PWM charge controller Cat MP-3720
- 2 x female PV connector Cat PS-5100
- 2 x male PV connector Cat PP-5102

MORE INFORMATION...

Individual solar products and hardware are featured elsewhere in our power section



Note: See individual products for warranty details.

↑ Voltage	Watts	Type	Cat.	Qty 1+
12V	145W	Fixed	ZM-9301	\$430.00

RECREATIONAL SOLAR PACKAGE DEALS (CONTINUED)

160 Watt Fixed Solar Panel Package

Includes:

- 2 x 80W monocrystalline solar panel
- 1 x 12V 20A PWM charge controller
- 3 x female PV connector
- 3 x male PV connector
- 1 x solar panel Y-lead 2 socket to 1 plug
- 1 x solar panel Y-lead 2 plug to 1 socket

Cat ZM-9097
Cat MP-3129
Cat PS-5100
Cat PP-5102
Cat PS-5110
Cat PS-5112



NEW
LOW
PRICE

Note: See individual products for warranty details.

↑	Voltage	Watts	Type	Cat.	Qty 1+
	12V	160W	Fixed	ZM-9303	\$590.00

290 Watt Fixed Solar Panel Package

Includes:

- 2 x 145W monocrystalline solar panel
- 1 x 12V 30A charge controller
- 3 x female PV connector
- 3 x male PV connector
- 1 x solar panel Y-lead 2 socket to 1 plug
- 1 x solar panel Y-lead 2 plug to 1 socket

Cat ZM-9087
Cat MP-3722
Cat PS-5100
Cat PP-5102
Cat PS-5110
Cat PS-5112



Note: See individual products for warranty details.

↑	Voltage	Watts	Type	Cat.	Qty 1+
	12V	290W	Fixed	ZM-9306	\$930.00

360 Watt Flexible Solar Panel Package

Ideal for fixed installations where with the solar panel mounted on a roof or deck. Suitable for caravans, small boats, motorhomes, sheds, weekend shacks, etc. Ideal to power LED lighting and 12V fridge/freezer. Solar panel mounting hardware, PC cable and crimping tool available separately.

- 2 x 12V 180W Flexible Monocrystalline Solar Panel
- 1 x 12V/24V 30A MPPT Solar Charge Controller
- 1 x 12V 100Ah Deep Cycle Gel Battery
- 1 x Battery Box with Power Accessories
- 1 x Waterproof Solar Power "PV" Connector 4mm Female
- 1 x Waterproof Solar Power "PV" Connector 4mm Male
- 1 x Solar Panel "Y" Lead 2 Socket to 1 plug 300mm
- 1 x Solar Panel "Y" Lead 2 Plug to 1 Socket 300mm
- 1 x Flexible LED Strip Light with Hook & Loop Backing

Cat ZM-9156
Cat MP-3735
Cat SB-1695
Cat HB-8500
Cat PS-5100
Cat PP-5102
Cat PS-5110
Cat PS-5112
Cat ST-3950



NEW
2015

Note: See individual products for warranty details.

↑	Voltage	Watts	Type	Cat.	Qty 1+
	12V	360W	Fixed/Flexible	ZM-9314	\$2,199.00

360 Watt Folding Solar Panel Package

A heavy duty portable solar solution if you are planning to camp for extended durations or have hungry power appliances. Portable panels can also be more convenient than fixed panels so you can park your caravan, motorhome or RV in the shade and have the panels up to 10m away in the sunlight.

- 2 x 180W Portable Fold-Up Solar Panel Kit
- 1 x 12V/24V 30A MPPT Solar Charge Controller
- 1 x 12V 100Ah Deep Cycle Gel Battery
- 1 x Battery Box with Power Accessories
- 1 x 50A Anderson® Piggyback lead, 8AWG, 300mm
- 1 x 50A Anderson® to Eye Terminal Lead, 8AWG, 300mm
- 2 x Flexible LED Strip Light with Hook & Loop Backing

Cat ZM-9136
Cat MP-3735
Cat SB-1695
Cat HB-8500
Cat PT-4442
Cat PT-4444
Cat ST-3950



NEW
2015

Note: See individual products for warranty details.

↑	Voltage	Watts	Type	Cat.	Qty 1+
	12V	360W	Folding	ZM-9316	\$2,199.00

PORTABLE SOLAR POWER

PORTABLE BATTERY CHARGERS

SMART SOLAR BATTERY CHARGER - 100 TO 120MA 15V



In sunlight, it supplies 15V at around 100-120mA of current. This is enough to keep a 12V battery that is infrequently used topped up. It is ideal for that second car, ride on lawnmower, tractor, boat, etc. It is housed in a plastic case, and has an output lead to cigarette lighter plug, with a LED which illuminates when the solar panel receives a charge.

Note, some cars will require this to be directly wired to the battery, as the cigarette lighter socket is disconnected when the ignition is switched off. Use the car lighter socket to battery clips PP-2007 for cars with switched lighter socket.

- Size: 370(L) x 160(W) x 20(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12V	MB-3501	\$39.95	\$35.90	\$31.90

HIGH EFFICIENCY MONOCRYSTALLINE SOLAR PANEL CHARGERS

Quality solar panels with high efficiency and smaller footprint compared to our regular monocrystalline models. An easy way to keep your 12V batteries topped up and ready to go on your caravan, farm equipment, the spare car, or on the shed out the back. The dust and weather resistant panel features a robust frame, and is supplied with 3m long leads terminated with battery clips. Each version is fitted with a blocking diode, so they are suitable for direct connection to your battery as a trickle charger (take note of the minimum battery capacity), or as a low current charger to replace a load or current drain on the battery. A charge controller such as AA-0348 is recommended on the 10W and 20W versions when there is not enough current drain to prevent over-charging of the battery.

- 5 year warranty against materials and workmanship, and 20 year warranty for power output no less than 80%

Specifications	ZM-9050	ZM-9051	ZM-9052
Maximum power (Pmax)	5W	10W	20W
Rated voltage	12V	12V	12V
Voltage at Pmax (Vmp)	17.4V	17.4V	17.4V
Current at Pmax (Imp)	290mA	580mA	1.16A
Open circuit voltage (Voc)	21.8V	21.8V	22.0V
Short circuit current (Isc)	310mA	610mA	1.21A
Min. battery capacity	50Ah	100Ah	200Ah
Weight	0.67kg	1.15kg	2.5kg
Dimensions	251(W) x 205(H) x 18(D)mm	385(W) x 253(H) x 30(D)mm	520(W) x 360(H) x 30(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
5W	ZM-9050	\$29.95	\$28.45	\$26.95
10W	ZM-9051	\$49.95	\$46.95	\$44.90
20W	ZM-9052	\$89.95	\$84.95	\$80.95

PORTABLE POWER BANK & LIGHTS

300 LUMEN SOLAR POWER PACK WITH LED LIGHTS

A fantastic all-in-one solar power solution for the garage, shed, caravan, boat, or even tent! This kit comes with a compact carry-handle equipped power pack that can be charged with the supplied 5W solar panel or through a mains connection using the 16VDC power supply. Two switch operated 3W cool white LED lights fitted with generously long 5m leads. There's a cigarette lighter socket on the side and a USB port on the front.

- 12V 4Ah AGM built in battery for 50Whrs
- 5.0VDC USB socket for charging Smartphones or Tablets
- LED indicators show battery and charge status
- 5W monocrystalline solar panel with stand

Solar Panel Specifications	
Power tolerance	+/- 5%
Maximum power	5W
Voltage at Pmax (Vmp)	17.4V
Current at Pmax (Imp)	0.29A
Open circuit voltage (Voc)	21.6V
Short circuit current (Isc)	0.32A
Dimensions	320(L) x 160(W) x 17(H)mm, 0.9kg

Power Pack Specifications	
USB Power Output	5V, 1000mA
Input DC socket	16V-26V
Output DC socket	12VDC
Weight	2.16kg
Dimensions	206(L) x 112(W) x 240(H)mm

↑	Solar Panel	Lumens	Cat.	Qty 1+	Qty 2+	Qty 4+
	12V	300	MB-3697	\$139.00	\$124.95	\$110.95

500 LUMEN SOLAR RECHARGEABLE LED FLOODLIGHT - MOTION SENSOR

Package includes an LED floodlight with built-in rechargeable battery which is charged via the 3W solar panel with 3m cable. The LED light automatically turns on when darkness falls, and is activated when the PIR detects motion. There is also provision for a 9VDC power supply (not included).

Solar panel specifications	Light specifications
Power	3W
Type	Polycrystalline
Vmp	9V
Imp	0.34A
Voc	10.6V
Solar panel	259(L) x 130(W) x 14(D)mm
	Power
	Charge time
	Working time
	Colour
	Charging voltage
	Dimensions

↑	Solar Panel	Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+
	12V	500	SL-2808	\$179.00	\$160.95	\$142.95

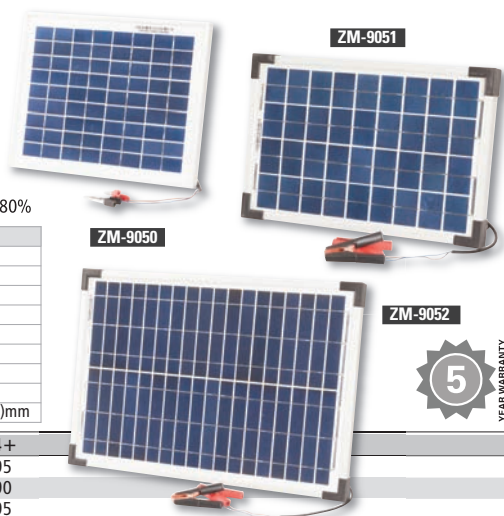
WATERPROOF SOLAR PANELS



These solar panels are ideal for charging sealed lead acid batteries. 2 models available. Supplied with mounting brackets, blocking diode, 2m output lead cable with alligator clips. Mounted in a plastic weatherproof case. Also ideal for marine use. They can be mounted on their brackets, and moved to follow the sun, or can be mounted flat on a surface. They are tough, and can be walked on if mounted flat (on a yacht or boat). Ideal for charging batteries in cars used infrequently.

Specifications	ZM-9016	ZM-9018
Wattage	1.26W	4.5W
Voltage (max)	18V	18V
Current (max)	Up to 70mA	Up to 250mA
Panel Dimensions	159(H) x 175(W) x 17(D)mm	187(H) x 255(W) x 17(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12V	ZM-9016	\$49.95	\$44.90	\$39.90
12V	ZM-9018	\$119.00	\$106.95	\$94.95



CARAVAN POWER ACCESSORIES

PORTABLE RCD WITH 15A TO 10A MAINS PLUG CONVERSION

Convert your 15A power lead to fit a 10A power outlet whilst adding the additional safety of RCD earth leakage protection. Ideal if you only have a device with a 15A mains plug, and you are located somewhere that does not have a 15A power outlet available. Features a 10A circuit breaker/RCD in case you accidentally overload the device. Not suitable for outdoor use, unless combined with our HB-6178 weatherproof case.



Specifications	MS-4044
Voltage	240VAC, 50Hz
Max load	2400W 10A
Rated residual current	30mA
RCD type	AC & DC pulse sensitivity
Dimensions	180(H) x 135(D) x 124(W)mm
Electrical Safety Approval Certificate No.	SAA122512EA



	Cat.	Qty 1+	Qty 4+	Qty 10+
15A to 10A Mains Adaptor	MS-4044	\$79.95	\$71.95	\$63.95

IP55 WEATHERPROOF BOX FOR MS-4044

This custom made IP55 weatherproof box is made by the good people at DRIBOX®, specifically to suit our MS-4044 Portable RCD with 15A-10A plug conversion. Adding this weatherproof box to your MS-4044 allows you to now take your setup outdoors and on the road with you, and gives full compliance for use with caravans and RVs. A cheap upgrade that is still less than half the price of the only other alternative.



- Dimensions: 250(W) x 250(D) x 190(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
Weatherproof DRIBOX®	HB-6178	\$49.95	\$44.90	\$39.90

WEATHERPROOF (IP55) CARAVAN POWER ADAPTOR WITH RCD

Finally, a product that legally allows you to connect your caravan/RV into a normal domestic power outlet WITHOUT leaving a hole in your hip pocket - no need for unsafe and illegally modified extension leads!! Weatherproof rated to IP55 it is safe to leave outside, and with a residual current device (RCD) safety switch, this product gives you the ability to safely and legally connect your caravan 15A power lead to a normal 10A power outlet. Also includes a 10A circuit breaker in case you accidentally overload the device. A must have for any caravan or RV. Fully certified for electrical safety (AS/NZS 3190) and compliant to Australia Standards for caravan wiring (AS/NZS 3001).



	Cat.	Qty 1+	Qty 4+	Qty 10+
MS-4044 + HB-6178	MS-4048	\$129.00	\$115.95	\$102.95

2 PIN 32 VOLT PLUGS & SOCKETS

For low voltage applications such as caravans etc up to 15amps.



Line Socket
PS-2073



Surface Socket
PS-2074



Line Plug
PP-2075



	Cat.	Qty 1+	Qty 10+	Qty 50+
Line Socket	PS-2073	\$16.95	\$14.95	\$13.35
Surface Socket	PS-2074	\$16.95	\$14.95	\$13.35
Line Plug	PP-2075	\$8.95	\$7.95	\$6.95

HEAVY DUTY 15A CARAVAN EXTENSION LEADS

Proper heavy duty mains extensions leads with 15A plugs and sockets, and a thick orange flexible cord. The 15A socket end also features an internal LED to indicate that power is present. Perfect for caravans and motorhomes.



	Cat.	Qty 1+	Qty 4+	Qty 10+
10m	PS-4182	\$24.95	\$22.35	\$19.70
15m	PS-4184	\$39.95	\$35.90	\$31.90
20m	PS-4186	\$44.95	\$40.45	\$35.90

TV ON THE MOVE

12V MASTHEAD AMPLIFIER POWER INJECTOR

An easy solution to powering a masthead amp on a caravan, RV, camper trailer etc. It plugs into a cigarette lighter/12V power socket and feeds power for a masthead amplifier. Simply connect between the antenna down lead and your set top box. F-type connections fitted.



- Suitable with LT-3251 VHF/UHF masthead amplifier

	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3259	\$34.95	\$31.45	\$27.90

OUTDOOR UHF/VHF/MARINE TV ANTENNA



Digital ready. It rotates. Ideal for "grey nomads". This unit is ideal for the traveller. Because you could be in any part of Aust/NZ this antenna works on all frequencies. (Some better than others, we admit). It covers VHF low, down to 45MHz (channel 2) to 860MHz (channel 69).

It includes a signal amplifier (12VDC powered, adaptor supplied) AND a rotator motor built into the antenna housing AND a remote control for that. It also comes with approx. 8 metres of TV lead with a weatherproof plug on one end.

- Includes booster amp
- Compatible with LT-3204 telescopic mast.
- Supplied with other hardware.
- Output 80 dbuV.
- Requires 2 x AAA batteries
- Antenna measures: 750(W) (deployed) x 300(L) x 100(D) (mm)
- Folds down for storage



	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3143	\$59.95	\$53.95	\$47.90

OUTDOOR OMNI-DIRECTIONAL UHF/VHF AMPLIFIED DIGITAL ANTENNA

With inbuilt low noise and high gain booster, this compact and weather resistant outdoor digital antenna is ideally suited for caravans, boats, and other fixed or mobile applications where space is constrained or harsh environmental conditions require a little extra durability. Excellent wide frequency reception for local free-to-air analogue and digital TV, DAB+ digital radio as well as FM radio transmissions. It can be either base mounted or mast mounted and includes mounting bracket, 12V mains power adaptor and a 12V in-car charger.



- SMD technology
- Anti-rust and UV protected

Specifications	
FM	87.5 - 108MHz
VHF	174-230MHz
UHF	470-862MHz
Output level	Max 108dB
Impedance	75 ohms
Receiver dish size	350(Dia) x 60(H)mm
Mounting base size	120(Dia) x 70(H)mm

	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3141	\$89.95	\$80.95	\$71.95

CARAVAN/RV (GENERAL PURPOSE) MAST

We have had many requests and finally found one. This unit in natural finish anodised aluminium is a telescopic mast suitable for TV and other antennas. It will extend to 1.5 metres in 3 sections. The top section is 27mm dia. which is compatible with almost all TV antenna mounting hardware. The bottom section is 35mm dia. which would easily be accommodated by U-bolt or other clamping hardware (not supplied).

The top section has a sturdy cap and features a slot which enables you to neatly thread the coax lead down through the mast.

- Length extended: 610mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
	LT-3204	\$24.95	\$22.35	\$19.70

POWER CONNECTORS

HIGH CURRENT CONNECTORS

Used widely in both domestic and industry, you'll find these connectors in many 4WD, boating, automotive and other industry applications. Supplied individually with a pair of contacts, all 5 current ratings have an operating temperature of -20° to +120°C.

INDIVIDUAL NESTING

They are genderless which means that there is no separate plug and socket and can be easily stacked to make custom configurations. Supplied as a red and black pair with contacts.



Specifications	PT-4405	PT-4406	PT-4407
Contact Rating	30A	45A	75A
Voltage	600V (AC or DC)	600V (AC/DC)	600 (AC or DC)
Contact Wire Size	1.63-2.59mm (10-14AWG), closed barrel	1.63-2.59mm (10-14AWG), open barrel	1.3mm - 13mm (#6 - #16AWG)
Max Wire Insulation Dia	4.4mm	4.4mm	1.3 - 13.3mm
Contact Retention Force	9kgs (20lbs)	9kgs (20lbs)	22kgs (50lbs)
Operating Temperature	-40 to +125°C	-40 to +125°C	-40 to +125°C

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
30A	PT-4405	\$4.95	\$4.45	\$3.90
45A	PT-4406	\$4.95	\$4.45	\$3.90
75A	PT-4407	\$11.95	\$10.70	\$9.50

15A RED & BLACK POWERPOLE HIGH CURRENT CONNECTORS

These are genderless which means that there is no separate plug and socket and can be easily stacked to make custom configurations. Compact to fit in tight places but rugged enough to handle most current loads. Supplied as a red and black pair with contacts.

NEW
2015

- Contact Rating: 15A
- Voltage: 600V (AC or DC)
- Operating Temperature: -20 to +105°C



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Powerpole	PT-4402	\$3.95	\$3.55	\$3.15

ANDERSON POWERPOLE SERIES 4 PIN DATA CONNECTOR

A genderless 4 pole signal Anderson connector in a PP15 casing. The design allows you to stack this with the PP15 series 15A Anderson connector (PT-4402) for DC and signal wiring connectivity. It provides a secure quick disconnect for power and signal distribution systems.

NEW
2015

- Up to 24 gauge for signal wire connectivity.
- Dimensions: 25(L) x 8(W) x 8(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Stackable	PT-4403	\$5.95	\$5.50	\$4.75

ANDERSON CONNECTORS - PLUG & SOCKET

These little connectors can handle up to 600 volts continuous in AC or DC with maximum current of 10A. The green housing provides a visual indication of the ground terminal. Suitable for use in numerous applications from automotive to aviation. They will fit wire size from 14-16 AWG (2.1 to 1.3 mm²). Supplied as plug and socket pair.

NEW
2015

- Plug Dimension: 27.5(H) x 8(L) x 8(W)mm
- Socket Dimension: 24.5(H) x 8(L) x 8(W)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
10A	PT-4416	\$5.95	\$5.50	\$4.75

4 WAY 15A ANDERSON CONNECTORS

These are the high impact and corrosion-resistant black thermoplastic outer shells with a 4 way 15A Anderson® multi-connectors. They allow easy connection and disconnection for the electrical equipment in commercial and industrial applications. The cable clamps provides strain relief and integral latches to prevent any accidental disconnections of your equipment. The positive latching provides security in applications where shock or vibration may be severe and the integral strain relief to reduce the risk of wire breakage.

NEW
2015

4 WAY 15A - PT-4434

- Dimensions: 57(L) x 32(W) x 22(H)mm

4 WAY 15A WITH LATCH - PT-4436

- Dimensions: 53(L) x 32(W) x 22(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
4 Way	PT-4434	\$12.95	\$11.35	\$10.35
4 Way with Latch	PT-4436	\$12.95	\$11.35	\$10.35

50A ANDERSON HIGH CURRENT CONNECTORS

Used widely in both domestic and industry, you'll find this connector in many 4WD applications, boating, automotive and other industries.

- Supplied as a moulded 2 pole with contacts.



Three models available:

Specifications	PT-4425	PT-4427	PT-4420
Contact Rating	50A	50A	50A
Contact Wire Size	#8 AWG	#12-10 AWG	13.3mm2 (#6 AWG)
Voltage Rating	600V (AC or DC)	600V (AC or DC)	600V (AC or DC)
Max Wire Insulation Diameter	11mm	11mm	11mm
Contact Retention Force	22kg	22kg	22kg
Operating Temperature	-20 to +105°C	-20 to 105°C	-20 to +120°C
Anderson Part No.			SB50-6319

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
8 AWG 50A	PT-4425	\$9.95	\$8.75	\$7.75
12-10 AWG 50A	PT-4427	\$9.95	\$8.75	\$7.75
6 AWG 50A	PT-4420	\$9.95	\$8.75	\$7.75

120A & 175A MOULDED PAIR

Used widely in both domestic and industry, you'll find this connector in many 4WD applications, boating, automotive and other industries.

- Supplied as a moulded 2 pole with contacts.



Specifications	PT-4422	PT-4424
Contact Rating	120A	175A
Contact Wire Size	33.6mm² (#2 AWG)	53.5mm² (#1/0 AWG)
Voltage Rating	600V (AC or DC)	600V (AC or DC)
Max Wire Insulation Diameter	14.6mm	19mm
Contact Retention Force	45.5kg (100lbs)	137kg (300lbs)
Operating Temperature	-20 to +125°C	-20 to +125°C
Anderson Part No.	B120-6800G1	SB175-6325G1

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
120A	PT-4422	\$19.95	\$17.70	\$15.70
175A	PT-4424	\$29.95	\$26.90	\$23.70



FOR HEAVY CURRENT CABLE SUITABLE FOR THESE CONNECTORS, SEE PAGE 212

TECH TALK!

ASSEMBLING ANDERSON STYLE CONNECTORS

These connectors come with absolutely no assembly instructions which might surprise some. Assembly is self-evident however. All that you really have to do is solder-sweat the heavy gauge wire into the 'pot' on the end of the connector tip. It is a good idea to puddle some solder into the pot and then lower the tinned wire into the pot. It may

be necessary to apply some more heat (usually with a small gas torch or stove gas top) to get the whole lot to melt. Try to keep the joint immobile until the solder 'sets', then cool off under tap water. And of course you can always crimp the lead into the solder cup, but this should really be done professionally. A piece of heat shrink ties the job nicely. The wire/lug/contact then just snaps into the housing.



HIGH CURRENT CONNECTORS (CONTINUED)

WATERPROOF ANDERSON CONNECTORS

These soft shell boots provide water, dirt, chemical and UV protection for the high current Anderson® connectors. The durable boots shield the connectors from water and dirt to IP64 when connected or by itself when the integral cover is used. The terminals of the rubber boot can also be customised to fit cables in-between 12-6 AWG (4-16mm²) wires.

- IP64 protection
- Resistant to UV, Roadway Chemical and Ozone
- Splash resistant when connected and by itself when the integral cover is used
- Customise boot terminals to fit your cables from 12-6 AWG which is 4-16mm²
- Mountable
- Easy to use

Dimensions when connected: 151(H) x 55(W) x 160(L)mm

50A BOOT LOAD SIDE - PT-4428

- Dimensions: 85(H) x 55(L) x 20(W)mm

50A BOOT SOURCE SIDE - PT-4429

- Dimensions: 85(H) x 55(L) x 20(W)mm

120A BOOT LOAD SIDE - PT-4431

- Dimensions: 112(H) x 57(L) x 39(W)mm

120A BOOT SOURCE SIDE - PT-4432

- Dimensions: 118(H) x 59(L) x 39(W)mm

175A BOOT LOAD SIDE - PT-4438

- Dimensions: 135(H) x 77(L) x 42(W)mm

175A BOOT SOURCE SIDE - PT-4439

- Dimensions: 135(H) x 68(L) x 42(W)mm



↑		Cat.	Qty 1+	Qty 10+	Qty 50+
	Boots to Suit 50A Male	PT-4428	\$14.95	\$13.45	\$11.95
	Boots to Suit 50A Female	PT-4429	\$14.95	\$13.45	\$11.95
	Boots to Suit 120A Male	PT-4431	\$17.95	\$16.10	\$14.35
	Boots to Suit 120A Female	PT-4432	\$17.95	\$16.10	\$14.35
	Boots to Suit 175A Male	PT-4438	\$19.95	\$17.95	\$15.70
	Boots to Suit 175A Female	PT-4439	\$19.95	\$17.95	\$15.70

HIGH CURRENT DUST/WATER RESISTANT RUBBER COVERS

A water and dust resistant rubber cover to suit our connectors.



↑	Suits		Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4420	50A	PM-4434	\$8.95	\$7.95	\$6.95
	PT-4422	120A	PM-4432	\$9.95	\$8.75	\$7.75
	PT-4424	175A	PM-4430	\$12.95	\$11.35	\$10.35

HANDLES FOR ANDERSON STYLE CONNECTORS

Facilitates easy connection/ disconnection. Ensures a secure grip, even with gloved hands for easier charging of electric forklifts etc.

Suits Anderson Style Connectors

50A	Cat. PT-4420	Cat. PM-4436
120A	Cat. PT-4422	Cat. PM-4438
175A	Cat. PT-4424	Cat. PM-4439



↑	Suits	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4420	PM-4436	\$7.95	\$6.95	\$6.75
	PT-4422	PM-4438	\$7.95	\$6.95	\$6.75
	PT-4424	PM-4439	\$12.95	\$11.35	\$10.95

50A ANDERSON PLUG TO INSULATED BATTERY CLAMPS

Tough insulated battery clamps connected to an Anderson plug. Ideal for connecting a solar panel, portable fridge, compressor, or inverter to a battery.

- 8 AWG cable
- 50A rated
- Insulated battery clamps
- Length: 300mm



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4449	\$19.95	\$17.95	\$15.70

RAINCHECK!

If your local Jaycar store has sold out of a currently advertised line we will be happy to issue you with a 'raincheck'.
Conditions apply - see page 528 for details.

50A ANDERSON LEADS

A series of Anderson connector leads for automotive, caravan, 4WD or industrial interconnection. The design of the Anderson connector housing is genderless, whereby each connector simply interconnects with another so you can't plug them in the wrong way - one less thing to worry about! Each lead is pre-made with machine crimped terminations, and tinned copper cable. Connectors are rated at 50Amps, with either 8AWG cable or 16AWG cable fitted depending on the model.



Five versions available:

PLUG EXTENSION LEAD, 8AWG, 5M

PIGGYBACK LEAD, 8AWG, 300MM

EYE TERMINAL LEAD, 8AWG, 300MM

ANDERSON TO 15A CIGARETTE PLUG LEAD, 16AWG, 300MM

ANDERSON TO 15A CIGARETTE SOCKET LEAD, 16AWG, 300MM

PT-4440

PT-4442

PT-4444

PT-4446

PT-4448



↑		Cat.	Qty 1+	Qty 10+	Qty 50+
	Plug Extension Lead	PT-4440	\$74.95	\$67.50	\$59.95
	Piggyback Lead	PT-4442	\$34.95	\$31.45	\$27.90
	Eye Terminal Lead	PT-4444	\$14.95	\$13.45	\$11.95
	Cigarette Plug Lead	PT-4446	\$16.95	\$14.95	\$13.35
	Cigarette Socket Lead	PT-4448	\$16.95	\$14.95	\$13.35

AUTOMOTIVE CONNECTORS

MERIT PLUGS & SOCKETS

Smaller in size than existing cigarette lighter connectors, they also have the advantage of a superior rugged construction and higher current carrying capability. The panel sockets feature a flip down cover to resist ingress of moisture and dust, and can withstand long periods of sustained current draw (unlike the el-cheapo versions of these connectors!). We have even included a modular merit plug to cigarette lighter adaptor in our range for those people who need both styles in a single connector (like those used on popular brands of 4WD fridges and spotlights).

PP-2090 Unfused Merit Plug (15A)

PS-2092 Merit Panel Socket with Sprung cover (max 15A)

PP-2094 Merit Plug with Cigarette Lighter adaptor (fused max 8A)

PS-2096 In-line Merit Socket with Cover (max 15A)



↑		Cat.	Qty 1+	Qty 10+	Qty 50+
	Unfused Plug	PP-2090	\$5.95	\$5.25	\$4.75
	Plug with Cigarette Lighter Adaptor	PP-2094	\$6.95	\$6.25	\$5.50
	Panel Socket with Sprung Cover	PS-2092	\$9.95	\$8.75	\$7.75
	In-line Socket with Cover	PS-2096	\$6.95	\$6.25	\$5.50

CIGARETTE LIGHTER PLUG TO MERIT SOCKET ADAPTOR

This handy adaptor lead allows you to connect your device equipped with a merit plug into a standard cigarette lighter socket.

- 300mm long



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-2098	\$12.95	\$11.35	\$10.35

TECH TALK!

Most of the products shown on these pages are designed for powering accessories in cars and trucks. They are perfect for example in wiring big power amps in your car. If you intend to use these components for critical applications (say, where safety is an issue) we suggest that you wire multiple circuits if possible and limit the current in each circuit accordingly. Then if you lose one circuit you will have some redundancy. You don't, for example want to lose your headlamp circuit at night because of Deep Purple! This principle, of course, applies to all high current wiring.

POWER CONNECTORS

AUTOMOTIVE CONNECTORS (CONTINUED)

AUTOMOTIVE WATERPROOF PLUG & SOCKET SETS

Waterproof automotive connectors commonly used on many modern cars for wiring connections within the engine bay and other areas that are exposed to moisture. The interlocking parts are surrounded by a rubber seal, while an individual grommet seals each wire. Each package includes plug, socket, cable grommets and crimp pins.



- Current rating: 20A (max.)
- Pin spacing: 7.5mm
- Assembled Length: 70mm

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2110	\$7.95	\$6.95	\$6.25
3 Way	PP-2112	\$10.95	\$9.75	\$8.75
4 Way	PP-2114	\$16.95	\$14.95	\$13.35
6 Way	PP-2116	\$19.95	\$17.70	\$15.70

WATERPROOF DEUTSCH 2 WAY CONNECTOR SET

High quality Waterproof 2-way "Deutsch" connectors commonly used in automotive or marine applications. Perfect for connecting up sensors/lights in the engine bay due to their superior corrosion protection and waterproof properties.



- Supplied as a male & female connector set with housings, wedges, seals and crimp pins.
- Rated to 13A current.

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PP-2150	\$6.95	\$6.25	\$5.50

AUTO TERMINAL SETS

GOLD PLATED BATTERY TERMINALS

This terminal is made from brass, and is gold plated. It has a 6mm bolt, and wing nut on which our gold terminals can be connected to run cabling to equipment.



- Suits positive car battery terminals

AMP-KING

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HC-4040	\$9.95	\$8.75	\$7.75

500A RED/BLACK SNAP ON BATTERY TERMINALS

Red/Black quick connect/disconnect battery terminals for automotive, marine, or industrial use. Used for protecting the exposed positive/negative battery connections from dust, grime or other build up.



- Rated at 500A
- Dimensions: 66(L) x 42(W) x 25(H)mm

Note: Battery not included

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	HM-3087	\$14.95	\$13.35	\$11.70

MULTI-CONNECT BATTERY TERMINAL - RED

This Multi-Connection Battery Terminal can be used to terminate up to 4 electronic devices. It can also be used separately as a bus-bar that connects to multiple devices. Perfect for simplify the wiring in the car, surveillance or security system and other 12V applications where multiple accessory wiring is needed.



NEW 2015

- Terminates up to 4 electronic devices
- Red colour for positive connections
- Does not need screws
- Spade terminals included
- Dimensions: 75(L) x 40(W) x 20(H)mm

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	HM-3089	\$9.95	\$8.75	\$7.75

4 WIRE 2G + 4G + 2X8G BATTERY TERMINALS

These 4 wire gold battery terminals will accept one 2GA, 4GA cables and two 8G cables. These units come complete with clear cover.



- NOTE: Cable not included

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Positive	HC-4048	\$19.95	\$17.70	\$15.70
Negative	HC-4049	\$19.95	\$17.70	\$15.70

MULTI-WAY CONNECTORS

AUTOMOTIVE MULTI-WAY PLUG / SOCKETS - 250 SERIES

Commonly used in automotive applications such as stereo and CB installations, or for replacements in existing wiring. The housings interlock and they come in 2, 3, 4, 6 or 8 way sets. Each comes with plug, socket, and male and female locking spade lugs.



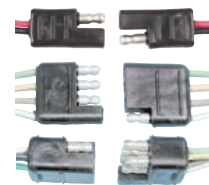
2 way & 6 way shown

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2062	\$2.95	\$2.60	\$2.30
3 Way	PP-2064	\$3.45	\$3.05	\$2.75
4 Way	PP-2066	\$3.95	\$3.45	\$3.15
6 Way	PP-2068	\$4.95	\$4.45	\$3.90
8 Way	PP-2069	\$6.95	\$6.25	\$5.50

WIRED MULTI PIN PLUGS / SOCKETS

Heavy duty plug and socket with bullet type connectors.

- Pre wired with 18AWG wire.
- Extremely handy when cables need to be periodically unplugged.
- Bullet style connectors



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2034	\$3.45	\$3.05	\$2.75
4 Way	PP-2030	\$8.95	\$7.95	\$6.95
6 Way	PP-2032	\$11.95	\$10.70	\$9.50

PIN EXTRACTION TOOL

Take the frustration out of removing Molex connector pins with these time save tools. Simply slide the tool over the connector and push the plunger to effortlessly remove the pin. Both male and female pin extractors available.



TH-1730

TH-1732

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Male Extractor	TH-1730	\$19.95	\$17.70	\$15.70
Female Extractor	TH-1732	\$19.95	\$17.70	\$15.70

MULTI PIN (MOLEX)

MINIATURE NYLON MOLEX-TYPE CONNECTORS

Suitable for high current/high density, wire-to-wire or wire-to-board applications. They are suitable for both power and signal connections.

- Fully isolated terminals
- Positive housing locks
- Four point of contact for reliability
- Low engagement force terminals
- Male and female pins supplied



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Pin	PP-2021	\$2.75	\$2.45	\$2.15
3 Pin	PP-2023	\$2.95	\$2.60	\$2.30
4 Pin	PP-2027	\$3.45	\$3.05	\$2.75
6 Pin	PP-2025	\$3.95	\$3.45	\$3.15

MULTI PIN PLUG / SOCKET

Each set consists of nylon body for male/female, along with male/female socket pins to fill all available poles. Will mate with standard MOLEX-type connectors.



PP-2020

TECH TALK!
Sometimes called Soft Shell connectors

↑	Cat	Qty 1+	Qty 10+	Qty 50+
2 Pole	PP-2020	\$2.75	\$2.45	\$2.15
3 Pole	PP-2022	\$2.95	\$2.60	\$2.30
6 Pole	PP-2024	\$3.95	\$3.45	\$3.15
12 Pole	PP-2026	\$6.95	\$6.25	\$5.50

JUMPER LEADS

JUMPER LEAD KITS

HEAVY DUTY

This kit has large alligator clips and heavy cable. The alligator clips are approximately 50mm long, and have jaw openings of about 10mm. Cable length is approx 300mm.

- 10 leads supplied, 2 of each colour.



STANDARD

Ideal for connecting devices for testing. Alligator clip size is approx 40mm, jaw opening is about 8mm and cable length is approx 400mm.

- 10 leads supplied 2 of each colour.

	Cat.	Qty 1+	Qty 10+	Qty 50+
Heavy Duty	WC-6020	\$11.95	\$10.70	\$9.50
Standard	WC-6010	\$6.95	\$6.25	\$5.35

HEAVY DUTY 400A 3.5M JUMPER LEADS WITH LED ILLUMINATION

A super handy set of jumper leads to leave in the back of the car! Each battery clamp has a LED light built in, powered by built-in batteries, so even in the dark you can find your way around the engine bay. The jumper leads are fitted with a voltage surge protector to keep your vehicle electronics safe, and are rated to 400A for heavy engine starting loads. Supplied in a clear plastic carry case.

- Voltage surge protection
- 400A current rating
- 8 x LR44 button batteries included
- 3m long



NEW
2015

	Cat.	Qty 1+	Qty 3+	Qty 6+
400A	WH-6012	\$29.95	\$26.95	\$23.70

EXTRA-HEAVY DUTY 700A 4.5M JUMPER LEADS WITH LED ILLUMINATION

These extra-heavy duty jumper leads have battery clamps with a helpful LED light built in, so you can find the battery terminals even in pitch black darkness. Rated at 700A, they are suitable for higher CCA (cold cranking amp) loads on big V6s, V8s and diesel 4WDs. At 4.5m long, they have that extra bit of length over your typical jumper leads, which always makes the difference when dealing with large 4WD engine bays. Fitted with a surge protector to protect sensitive electronics, and supplied in a handy clear plastic carry case. LEDs powered by built in batteries (included).

- Voltage surge protection
- 700A high current rating
- 8 x LR44 button batteries included
- 4.5m long



NEW
2015

	Cat.	Qty 1+	Qty 3+	Qty 6+
700A	WH-6014	\$69.95	\$62.95	\$55.95



IF YOU ARE READING THIS PAGE YOU MAY HAVE AN APPLICATION FOR HIGH-CURRENT WIRING. FOR SUITABLE HEAVY-DUTY CABLE CHECK OUT PAGES 212 & 213 FOR CABLE DOWN TO "0" GAUGE. YOU MIGHT ALSO FIND THE AUTOMOTIVE CABLING HARDWARE AND FUSES ON PAGES 298 TO 300 INTERESTING.

BUY IT ON THE WEB...

Shop for all these Jaycar Electronics products online at our website - and check out our latest products and special offers!



ALLIGATOR CLIPS

4MM BANANA SOCKET TO ALLIGATOR CLIP

Available in black or red



	Cat.	Qty 1+	Qty 10+	Qty 50+
Red	PA-3668	\$2.75	\$2.45	\$2.15
Black	PA-3669	\$2.75	\$2.45	\$2.15

CAT III RATED BANANA ALLIGATOR CLIP

Takes standard and fully insulated 4mm banana plugs and turns them into an alligator clip.

- CATIII rated.
- Sold as a pair, red and black.



	Cat.	Qty 1+	Qty 10+	Qty 50+
	PA-3696	\$9.95	\$8.75	\$7.75

ALLIGATOR CLIPS

- Sold as a pair
- 1 x red & 1 x black



	Cat.	Qty 1+	Qty 10+	Qty 50+
26mm	HM-3020	\$1.50	\$1.35	\$1.20
32mm	HM-3022	\$1.95	\$1.75	\$1.55

ALLIGATOR CLIPS WITH SCREW

No soldering required. Large alligator clips with plastic finger grips and a screw for connection.

- Length 55mm
- Max jaw opening 12mm
- Sold as a pair or singly



	Cat.	Qty 1+	Qty 10+	Qty 50+
1 x Red & 1 x Black, Pair	HM-3025	\$2.45	\$2.15	\$1.95

CAR BATTERY TYPE CLIPS

- All have insulated colour coded handles
- Sold in pairs.

Specifications		
15Amp	Length 55mm	Max jaw opening 14mm
30Amp	Length 70mm	Max jaw opening 20mm
50Amp	Length 98mm	Max jaw opening 25mm
200Amp	Length 130mm	Max jaw opening 35mm
400Amp	Length 155mm	Max jaw opening 22mm

The 400 amp versions are very large and very strong. You cannot put your finger in the end, because it will probably give you a bite! These are ideal for our 300W and 500W inverters.



	Cat.	Qty 1+	Qty 10+	Qty 50+
15A	HM-3010	\$3.50	\$3.15	\$2.75
30A	HM-3012	\$3.95	\$3.45	\$3.15
50A	HM-3015	\$5.50	\$4.90	\$4.30
200A	HM-3060	\$9.95	\$8.75	\$7.75
400A	HM-3085	\$15.95	\$14.35	\$12.70

400 AMP STAINLESS STEEL BATTERY CLAMPS

Rated at 400 amps this pair of heavy duty battery clamps are ideal for making up jumper leads and for use with our inverters. All metal parts are made from 316 marine grade stainless steel, they can be taken and used anywhere without the risk of corrosion.

- Sold per pair
- Current rating: 400 amps
- Length 165mm
- Max jaw opening 50mm
- 316 Grade (marine grade) stainless steel



	Cat.	Qty 1+
400A	HM-3086	\$5.95

NEW
LOW
PRICE

CIGARETTE LIGHTER PLUGS, SOCKETS & ADAPTORS

CIGARETTE LIGHTER PLUGS

5 AMP LEAD WITH BARE ENDS

Lead with a 5 amp fused cigarette lighter plug on one end.

- Cable length: 450mm approx.
- Cable thickness: 18AWG



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
3A 3G	PP-1995	\$2.95	\$2.60	\$2.30

8 AMP LEAD WITH BARE ENDS

A lead consisting of an 8 amp fused cigarette lighter plug and 5 metres of thick cable.

- 18 AWG cable



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
8A	PP-1998	\$11.95	\$10.70	\$9.50

CIGARETTE LIGHTER PLUG

Simply plugs into the car cigarette lighter socket to obtain 12VDC from the car battery.

- Economy grade



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Economy	PP-2000	\$1.65	\$1.45	\$1.30

CIGARETTE LIGHTER PLUG - FUSED

As PP-2000 but with the added safety benefit of being fused. Supplied with 3A fuse.

- Recommended



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Fused	PP-2001	\$3.95	\$3.45	\$3.15

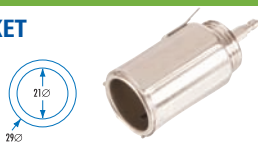
TECH TALK!

Auto cigarette lighter wiring rarely allows more than 15A to be taken from this circuit.

CIGARETTE LIGHTER SOCKETS

CIGARETTE LIGHTER CHASSIS SOCKET

- Install in dash
- 21mm hole required



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2002	\$6.95	\$6.25	\$5.50

CIGARETTE LIGHTER INLINE SOCKET

- 5A max



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2003	\$3.95	\$3.45	\$3.15

UNDER DASH CIGARETTE LIGHTER SOCKET WITH PROTECTIVE CAP

This socket can be mounted under a car or boat dash and features a hinged cap with protective gasket.

- Heavy duty auto cable pre-attached
- 450mm length.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2008	\$12.95	\$11.35	\$10.35

UNDER DASH DOUBLE CIGARETTE LIGHTER SOCKET

A dual socket mounted on a steel frame which in turn mounts under the dashboard. Heavy duty auto cable is included with in-line fuse holder and terminated with a bullet and Y connector.

- Lead length 300mm
- Self tapping mounting screws included



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2009	\$12.95	\$11.35	\$10.35

15A CIGARETTE SOCKET TO 8MM EYE TERMINAL

A handy lead allowing you to power your 12VDC cigarette lighter plug devices from a range of 12VDC sources. The cigarette lighter socket is attached to 16AWG 400mm long red and black lead with 8mm eye terminals on each end.

- Rated to 15A max.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PT-4451	\$12.95	\$11.35	\$10.35

DASH/PANEL MOUNT CIGARETTE LIGHTER SOCKET WITH CAP, 15A

Provides a cap protected cigarette lighter socket for your boat, car, or truck. Easy to install includes 2 x countersunk screw holes for easy mounting. Rated at 15A with 6.3mm spade connections

- Dimensions: 56(W) x 31(H) x 50(D)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2004	\$9.95	\$8.75	\$7.75

CAR CIGARETTE LIGHTER SOCKET WITH LID

This weatherproof 12V car cigarette lighter socket can be flush mounted and has a springloaded lid to keep it free of dust and debris.

- Perfect for caravan, marine, 4WD or other harsher than normal applications.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-2015	\$14.95	\$13.35	\$11.70

WEATHERPROOF CIGARETTE LIGHTER SOCKET - 15A

Suitable for marine, caravan, 4WD, camping or anywhere you need 12V power. Protected from the elements by a spring-loaded sealed cover and fully sealed electrical connection.

- Panel mounting.
- 32mm mounting hole
- Flylead termination.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-2011	\$14.95	\$13.35	\$11.70

UNDER-DASH OR PANEL MOUNT USB SOCKET

This handy fitting enables you to position a USB outlet under a wooden, fibreglass or metal dashboard complete with rubber plug moisture/dust cover. Alternatively, you can remove the actual USB insert to panel mount the USB socket. The insert requires a 22mm Dia hole but it will go through upto 38mm of panel so your panel can be wood if necessary. This is a very versatile fitting and you have to see it to appreciate what it is capable of.

- In-line fuse holder included
- Sealing washers/gaskets included
- Mounting screws included
- Smart silver trim bezel included



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PS-2016	\$10.95	\$9.75	\$8.75

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here!
Check our website for over 3,500 pages of data!



CIGARETTE LIGHTER ADAPTORS & SPLITTERS

A new exciting range of 12/24VDC adaptors to suit a variety of cars or trucks. Choose between six new models including dual and triple outlet models, some with USB ports to charge Smartphones or Tablets and other USB charged gadgets. They all come with an adjustable screw on the cigarette lighter plug which allows secure connection to all types of European, American, & Japanese cars.

- Input voltage: 12-24VDC
- Output voltage: 12V-24VDC
- Output current: <6A

Choose one suitable for your needs

12V/24VDC CIGARETTE LIGHTER SOCKET WITH USB PORT

Allows you to power a USB gadget while still keeping your cigarette lighter socket available.

- Cigarette lighter plug can be adjusted 180°
- Adjustable plug to fit all types of European, American & Japanese cars
- LED indicator
- USB output: 5VDC 2A (max)
- Overall width: 60mm



NEW
LOW
PRICE

↑	Cat.	Qty 1+
	PP-2126	\$5.95

12VDC CIGARETTE LIGHTER TWIN SOCKET

Allows you to run two 12V appliances from the one socket.

- LED indicator.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-2005	\$9.95	\$8.75	\$7.75

12V/24VDC CIGARETTE LIGHTER SOCKET SPLITTER CABLE WITH 2 X USB PORTS

- Powers two 12-24VDC accessories at the same time
- Fits all types of European, American & Japanese cars
- Detachable mounting bracket with 3M adhesive
- Power on/off switch function
- USB output: 5VDC 2A (max)
- Overall width: 90mm
- Cable length: 1.2m



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.2m	PP-2129	\$29.95	\$26.90	\$23.70

12/24VDC CIGARETTE LIGHTER SOCKET SPLITTER WITH 2 X USB PORTS

Power two 12V accessories and 2 x USB devices at the same time. Features a fused cigarette lighter plug on a 650mm lead, and mounting holes for a permanent installation.



NEW
2015

- Input: 12/24VDC
- Output:
 - Cigarette Lighter Sockets: 2 x 3A max each
 - USB Ports: 2 x 5V 2.1A total
- Cable length: 650mm
- Dimensions: 114(L) x 50(D) x 33(H)mm

1
YEAR
WARRANTY

↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	650mm	PP-2136	\$14.95	\$13.45	\$11.95

12VDC CAR CIGARETTE LIGHTER SOCKET 4 WAY SPLITTER WITH USB PORT

This socket splitter enables you to power up to four 12VDC plug appliances at once. Plus it features a USB port to charge your iPhone® or other USB gadget. Comes with a detachable mounting base so you can mount this unit horizontally or vertically on your dash or centre console, and detach it for flexible use. Use this socket splitter with our 12V plug to socket extension cord PP-1990 to enjoy more creature comforts in your tent on your next camping trip.

- 12VDC plug with 1.2m lead
- 4 x 12VDC socket outputs
- 1 x 5VDC 1A USB port
- 10A max



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.2m	PS-2019	\$19.95	\$17.70	\$15.70

CIGARETTE LIGHTER ADAPTORS

FUSED CIGARETTE LIGHTER PLUG TO 2.1MM DC PLUG

Has an internal fuse & LED power indicator.

- Supplied with 3A, 3AG fuse
- Cable length 500mm
- LED power indicator



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	500mm	PP-1993	\$2.95	\$2.60	\$2.30

FUSED CIGARETTE LIGHTER PLUG TO 2.5MM DC PLUG

Has an internal fuse and LED power indicator.

- Supplied with 5A, 3AG fuse
- Cable length 1.5m



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.5m	PP-1997	\$4.95	\$4.45	\$3.90

REPLACEMENT POWER LEAD FOR THERMOELECTRIC COOLER/WARMERS

A replacement DC power lead to suit most common thermoelectric cooler/warmers which have the notched rectangular shape DC power input.

- Can fit into cigarette or merit sockets
- 1.8m long



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.8m	PP-1986	\$17.95	\$16.10	\$14.35

CIGARETTE LIGHTER ADAPTOR CABLE

Contains no circuitry and allows you to power 12V devices from your car cigarette lighter socket.

- Cable length 1.8m long
- Fused
- LED power indicator. Supplied with 8 DC plugs. 2.35 x 0.75, 3.5 x 1.35, 4 x 1.7, 5.5 x 1.5, 5 x 2.1, 5.5 x 2.5, 2.5mm & 3.5mm. (OD first then ID)



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1.8m	PP-1996	\$8.95	\$7.95	\$6.95

CIGARETTE LIGHTER DOUBLE ADAPTOR

Incorporates a lighter plug and two inline sockets

- 150mm cable



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	150mm	PP-2006	\$9.95	\$8.75	\$7.75

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.



*ABN will be required - see our website or Store Manager for further details.

CIGARETTE LIGHTER PLUGS, SOCKETS & ADAPTORS

ADAPTORS & EXTENDERS

CAR LIGHTER SOCKET TO CLIPS

This lead simply clips onto car battery terminals and has a cigarette lighter socket on the other end.



↑ Length	Cat.	Qty 1+	Qty 10+	Qty 50+
400mm	PP-2007	\$9.95	\$8.75	\$7.75

MERIT PLUG TO CIGARETTE LIGHTER SOCKET

Allows you to connect mobile phone chargers and other cigarette lighter plugged devices into vehicles equipped with a Merit socket.



↑ Length	Cat.	Qty 1+	Qty 10+	Qty 50+
300mm	PP-2099	\$12.95	\$11.35	\$10.35

CIGARETTE LIGHTER EXTENSION CORD

Cigarette lighter extension cord with dust cover. Extend the range of your cigarette lighter devices.

- Fuse: 5A



↑ Length	Cat.	Qty 1+	Qty 3+	Qty 6+
300mm	PP-1992	\$12.95	\$11.35	\$10.35

CIGARETTE LIGHTER PLUG TO MERIT SOCKET ADAPTOR

This handy adaptor lead allows you to connect your device equipped with a merit plug into a standard cigarette lighter socket.



↑ Length	Cat.	Qty 1+	Qty 10+	Qty 50+
300mm	PP-2098	\$12.95	\$11.35	\$10.35

HEAVY DUTY 10A CIGARETTE POWER EXTENSION LEAD - 5M

This cigarette power extension lead has been specifically designed to carry 15A continuous current with minimal voltage drop (max 10% at 15A). This allows you to move your DC fridge/freezer and other DC equipment some distance away from your battery, whilst minimising low voltage protection issues. Very handy on the campsite or in your caravan. Fitted with a convertible cigarette/merit plug and high current cigarette socket, and made with 14AWG tinned copper cabling.



↑ Length	Cat.	Qty 1+	Qty 3+	Qty 6+
5 metres	PP-2151	\$39.95	\$35.90	\$31.90

15A HEAVY DUTY CIGARETTE LIGHTER EXTENSION LEAD - 3M

A heavy duty waterproof cigarette lighter extension lead to extend the reach of your 12VDC devices. Features internal fuse protection with LED power indicator. Fits all 12VDC plugs & sockets. Flexible curly cord design.



↑ Length	Cat.	Qty 1+	Qty 3+	Qty 6+
3 metres	PP-2144	\$12.95	\$11.35	\$10.35

OPEN A STORE ACCOUNT WITH US

Jaycar accepts account applications from all established companies who can exhibit good trade references.
For application details see our Store Managers.

MARINE GRADE CIGARETTE PLUGS & SOCKETS

MARINE GRADE 10A LOCKING CIGARETTE PLUGS & SOCKETS

Marine grade, weather and UV resistant. Ideal for situations where your 12V gear will face mud, dust, salt and other contaminants. A matched locking plug and socket will lock together securely for protection against vibration and shock, or happily work individually with normal cigarette plugs/socket as well.

- PP-1970 plug features a green power LED indicator
- Rated current: 10A
- Fuse protected (PP-1970)
- PS-1972 features protective dust cap and mounting panel
- Locking pins so stay plugged in when plug and socket matched
- Dimensions:
 - PP-1970: 90(L) x 25(Dia)mm
 - PS-1972: panel: 59(L) x 43(W) x 4(D)mm, socket 40(L) x 36(Dia)mm
 - PS-1974: 70(L) x 51(H) x 58(W)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Cigarette Plug with LED	PP-1970	\$6.95	\$6.25	\$5.50
Dust Cover for PP-1970	PS-1972	\$6.95	\$6.25	\$5.50
Cigarette Socket with Dust Cover	PS-1974	\$12.95	\$11.35	\$10.35

MARINE GRADE 10A CIGARETTE POWER SOCKETS

High current, marine grade cigarette power sockets capable of up to 10A current, and supplied with multiple mounting options. There is a flat mounting panel, an under dash bracket (for PS-2020 only), and a surface mounting "hood".

- Connections via 6.3mm spade terminals

Four versions available:



SINGLE CIGARETTE POWER SOCKET

Includes panel, under dash & surface mount brackets
PS-2020



DUAL CIGARETTE POWER SOCKETS

Includes panel & surface mount brackets
PS-2022



CIGARETTE POWER SOCKET AND LED VOLTMETER

Includes panel & surface mount brackets
PS-2024



CIGARETTE POWER SOCKET & 2 PORT USB CHARGER (3.5A)

Includes panel & surface mount brackets
PS-2026



Dimensions - Panel mount:

- Single - 60(W) x 42(H)mm
- Dual - 100(W) x 42(H)mm
- Surface mount hoods:
 - Single - 55(W) x 80(L) x 50(H)mm
 - Dual - 98(W) x 78(L) x 49(H)mm
- Under dash bracket: 58(W) x 51(H) x 15(D)mm (PS-2020 only)

↑ Cigarette	Cat.	Qty 1+	Qty 10+	Qty 50+
Socket - Single	PS-2020	\$14.95	\$13.45	\$11.95
Socket - Dual	PS-2022	\$19.95	\$17.95	\$15.70
Socket with LED Voltmeter	PS-2024	\$27.95	\$24.95	\$22.35
Socket with 2 USB Ports	PS-2026	\$29.95	\$26.95	\$23.70

USB UNDERDASH SOCKET

USB SOCKET WITH WEATHERPROOF CAP

A USB power socket with weatherproof cover, suitable for mounting on motorbikes, under-dash on boats or open-top cars. Outputs 5VDC to power or charge Smartphones, Tablets, GPS, etc. Mount to almost any surface using screws, cable ties, double-sided tape, etc (Mounting hardware not included). Supplied with 1.2m twin lead with SAE connectors for easy disconnect.

- Power input: 12-24VDC
- Output: 5VDC, up to 2.1A



NEW 2015

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
12/24VDC 1.2m	PS-2017	\$19.95	\$17.95	\$15.70

USB CIGARETTE LIGHTER CHARGERS

2 PORT USB CHARGER WITH 3.1A OUTPUT, 12/24VDC

Get rid of your messy cigarette lighter car chargers, and fit something more permanent and better looking. This 2 port USB charger has one port with 1.0A for charging a Smartphone, and the 2nd port can deliver 2.1A for fast charging your Tablet. Input power compatible with 12V and 24V battery systems, with connection via 6.3mm spade terminals.

- Supplied with panel mount, under dash bracket, and a surface mount "hood"

Dimensions:

- 2port USB Charger: 36(Dia) x 50(D)mm
- Panel mount: 60(W) x 42(H)mm
- Under dash bracket: 58(W) x 51(H) x 15(D)mm
- Surface mount hood: 55(W) x 80(L) x 50(H)mm



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
2 x USB	MP-3616	\$24.95	\$22.50	\$19.95

2 PORT PANEL MOUNT USB CHARGER - 3.1A OUTPUT 12/24VDC

This two port USB panel mount charger is designed for charging your electronic devices. It has a black housing with a rubber weather-flap cover to protect the USB sockets. Ideal for quickly charging a GPS, iPhone®, iPod®, PSP, mobile phones, camera and other digital devices. Designed in the same housing as our range of laser etched auto rocker switches, enabling you to mount them side by side to give a great look to the switch panel in your 4WD, RV, or Caravan etc.

- Dual USB output 5V, 3.1(Shared between two ports)
- Fused
- Easy to install
- Input: 12-24VDC
- Output: 5VDC
- Dimensions: 43(L) x 40(D) x 24(W)mm



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
2 x USB	MP-3618	\$24.95	\$22.50	\$19.95

6.2A 4 PORT USB CAR CHARGER

Simply plug into your car's cigarette lighter socket, and you have a readily available USB charging source. An inbuilt smart charging IC it makes it suitable for charging various brands of Smartphones, Tablets or any other USB power hungry devices at their full charge rate. It has four USB sockets with total 6.2A combined output power to charge or power multiple power hungry USB devices.



NEW 2015

1 YEAR WARRANTY

Specifications	
Input	12-24VDC
Output	5VDC, 2 x 2.1A + 2 x 1A (6.2A total)
Dimensions	80(L) x 45(W)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
4 x USB	MP-3668	\$24.95	\$22.50	\$19.70

BATTERY MONITORS

CAR BATTERY MONITOR WITH 3 X USB SOCKETS

Plugs into the car's cigarette lighter socket to display the car's battery voltage, and at the same time power your Smartphone, GPS and other USB powered devices via the 3 x USB ports. It is also suitable for trucks and large boats that run on 24V. You will need to provide your own USB charging lead.

- Input power: 12-24V
- Output power: 5VDC/3.1A total
- Dimensions: 60(W) x 30(H) x 28(D)mm



NEW 2015

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
3 x USB	PP-2138	\$24.95	\$22.50	\$19.95

SELF POWERED ROUND LED VOLTMETER 5-30VDC

Quite possibly the easiest way to monitor your battery voltage, or the voltage in any DC powered system. Simply wire up to a positive and negative DC power source of 5-30VDC, and the voltmeter tells you the voltage (taking power from the DC source to operate). Supplied with a panel mount and a surface mount "hood". Connection is via 6.3mm spade terminals.



Dimensions:

- Voltmeter: 36(Dia) x 26(D)mm
- Panel mount: 60(W) x 42(H)mm
- Surface mount hood: 55(W) x 80(L) x 50(H)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
LED Voltmeter	QP-5582	\$22.95	\$20.35	\$18.35

SAE POWER LEADS

SAE TYPE PLUG TO CIGARETTE LIGHTER PLUG OR SOCKET

These units consist of the popular polarised SAE plug/skt to a line cigarette lighter socket. The socket has a rubber moisture/dust cover. The lead assembly is 450mm long and the wiring is 10A rated, unfused.

Three models available.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
SAE Plug to Battery Fused Lead	PP-2012	\$9.95	\$8.75	\$7.75
SAE Plug to Cigarette Plug Lead	PP-2014	\$9.95	\$8.75	\$7.75
SAE Plug to Cigarette Socket Lead	PP-2016	\$9.95	\$8.75	\$7.75

CUSTOMERS PLEASE NOTE! TECHSTORE SPECIALS

SUPER BARGAINS ONLY AVAILABLE THROUGH TECHSTORE

MORE INFO WEB

Many of you who see our regular ads have made personal visits for some products not available to shop customers. These products are usually in such short supply there is simply not enough to distribute to all stores. Indeed some items could be as few as half a dozen.

Such goods are sold through our "TECHSTORE".

When we advertise these products, we box them in a special section marked off with

'TECHSTORE ONLY - NOT AVAILABLE IN RETAIL STORES'.

Unfortunately many do not notice this and become angry when the product is not in their local store.

Please do not blame the local manager for this, he has no control, nor can he transfer stock from the TECHSTORE to his shop for you. If you wish to buy these items you must hurry and order direct to the TECHSTORE.

AUTO CIRCUIT PROTECTION

PORTABLE POWER

SINE WAVE INVERTER PETROL GENERATORS 1kW & 2kW VERSIONS AVAILABLE

4-stroke petrol powered inverter generator with a stable, pure sine wave 230VAC, suitable for all appliances including sensitive electronics and motor powered appliances. No matter what the load is on the generator or the speed of the engine, the output remains very well regulated to 230VAC. The added benefit is that the petrol motor is far better matched to the load, reducing overall size, keeping engine speed in line with the load, reducing noise and increasing fuel efficiency. Features include low oil cut-out, and overload circuit breaker. For full specs see page 311.



MG-4501



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
1kW Sine Wave Generator	MG-4501	\$699.00	\$665.00	\$629.00
2kW Sine Wave Generator	MG-4502	\$929.00	\$885.00	\$835.00

150W CAN-SIZED POWER INVERTER WITH 2.1A USB OUTPUT

Fits in the car's cup holder, plugs into the cigarette lighter socket and outputs 230VAC to power a variety of 230VAC equipment from a battery charger to a laptop power supply. Also features a USB port with 2.1A output, allowing you to quickly charge many modern electronics gadgets, including power-hungry Tablets. It also features electrical isolation to prevent sudden mains voltage at your cigarette lighter socket.



- Powered by cigarette lighter socket adaptor
- Modified sine wave
- USB Output: 5VDC 2.1A
- Dimensions: 165(L) x 60(Dia.)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
150W	MI-5127	\$49.95	\$44.90	\$39.90

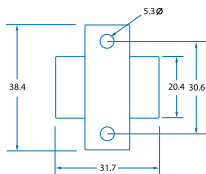
FOR FULL RANGE OF POWER
INVERTERS SEE PAGES 312 - 317

CIRCUIT BREAKERS

CHASSIS MOUNT AUTO CIRCUIT BREAKERS

Single pole thermal circuit breaker.

- Auto reset.



↑	Current	Voltage	Cat.	Qty 1+	Qty 10+	Qty 25+
	20A	12VDC	SF-4100	\$7.95	\$6.95	\$6.25
	30A	12VDC	SF-4102	\$7.95	\$6.95	\$6.25
	40A	12VDC	SF-4104	\$7.95	\$6.95	\$6.25
	50A	12VDC	SF-4106	\$7.95	\$6.95	\$6.25
	20A	24VDC	SF-4108	\$7.95	\$6.95	\$6.25

HEAVY DUTY PANEL MOUNT CIRCUIT BREAKERS

A range of heavy duty and high quality panel mount circuit breakers. The reset switch on these units are high grade and will not fail in short period unlike other units in the market. It has a protective plastic cover to prevent accidental shorage. Incorporates multi-wire gauge inputs and outputs, they are perfect for high end car audio installations, automotive wiring or solar installations. Terminals are platinum plated. Measures at 85(W) x 68(H) x 35(D)mm.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
60A	SZ-2081	\$34.95	\$31.45	\$27.90
120A	SZ-2083	\$34.95	\$31.45	\$27.90
200A	SZ-2085	\$34.95	\$31.45	\$27.90

LOOKING FOR RELAYS?
SEE PAGES 118 - 122

CIRCUIT BREAKERS - BLADE FUSE SIZE

A blade fuse that doesn't need replacing! This new range of mini and standard size Blade circuit breakers are designed to directly replace standard or mini blade fuses. No need to fumble around in the dark looking for the blown fuse or to dig around in the toolbox for a suitable replacement.

Choose between manual or automatic reset types. The manual type suit 12V-24V systems and trip once the current is exceeded, and allow you to fault find the circuit before resetting. The auto reset type suits 12V systems and will re-establish power to the circuit once the current returns to normal levels.

Available in Mini or Standard size, and come in similar colour coding to standard blade fuses.

MINI BLADE CIRCUIT BREAKERS - MANUAL RESET

- Voltage: Circuits up to 28VDC
- Body dimensions: 25(L) x 12.5(W) x 7(D)mm (excludes 1mm reset button)
- Total length including blades: 35mm (excludes 1mm reset button)



NEW
2015

↑	Current	Colour	Type	Cat.	Qty 1+	Qty 10+	Qty 25+
	5A	Tan	Manual	SF-2352	\$5.95	\$5.50	\$4.75
	10A	Red	Manual	SF-2354	\$5.95	\$5.50	\$4.75
	15A	Blue	Manual	SF-2355	\$5.95	\$5.50	\$4.75
	20A	Yellow	Manual	SF-2356	\$5.95	\$5.50	\$4.75

MINI BLADE CIRCUIT BREAKERS - AUTO RESET

- Voltage: Circuits up to 14VDC
- Body dimensions: 25(L) x 12.5(W) x 6(D)mm
- Total length including blades: 35mm



NEW
2015

↑	Current	Colour	Type	Cat.	Qty 1+	Qty 10+	Qty 25+
	5A	Tan	Auto	SF-2342	\$5.95	\$5.50	\$4.75
	10A	Red	Auto	SF-2344	\$5.95	\$5.50	\$4.75
	15A	Blue	Auto	SF-2345	\$5.95	\$5.50	\$4.75
	20A	Yellow	Auto	SF-2346	\$5.95	\$5.50	\$4.75

STANDARD BLADE CIRCUIT BREAKERS - MANUAL RESET

- Voltage: Circuits up to 28VDC
- Body dimensions: 24(L) x 20(W) x 6(D)mm (excludes 1mm reset button)
- Total length including blades: 31mm (excludes 1mm reset button)



NEW
2015

↑	Current	Colour	Type	Cat.	Qty 1+	Qty 10+	Qty 25+
	5A	Lt. Brown	Manual	SF-2330	\$5.95	\$5.50	\$4.75
	7.5A	Brown	Manual	SF-2331	\$5.95	\$5.50	\$4.75
	10A	Red	Manual	SF-2333	\$5.95	\$5.50	\$4.75
	15A	Blue	Manual	SF-2334	\$5.95	\$5.50	\$4.75
	20A	Yellow	Manual	SF-2335	\$5.95	\$5.50	\$4.75
	25A	White	Manual	SF-2336	\$5.95	\$5.50	\$4.75
	30A	Green	Manual	SF-2337	\$5.95	\$5.50	\$4.75

STANDARD BLADE CIRCUIT BREAKERS - AUTO RESET

- Voltage: Circuits up to 14VDC
- Body dimensions: 24(L) x 20(W) x 6(D)mm
- Total length including blades: 31mm



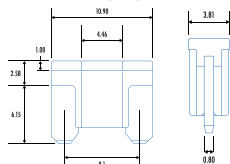
NEW
2015

↑	Current	Colour	Type	Cat.	Qty 1+	Qty 10+	Qty 25+
	5A	Lt. Brown	Auto	SF-2320	\$5.95	\$5.50	\$4.75
	7.5A	Brown	Auto	SF-2321	\$5.95	\$5.50	\$4.75
	10A	Red	Auto	SF-2323	\$5.95	\$5.50	\$4.75
	15A	Blue	Auto	SF-2324	\$5.95	\$5.50	\$4.75
	20A	Yellow	Auto	SF-2325	\$5.95	\$5.50	\$4.75
	25A	White	Auto	SF-2326	\$5.95	\$5.50	\$4.75
	30A	Green	Auto	SF-2327	\$5.95	\$5.50	\$4.75

STANDARD BLADE FUSES

MICRO BLADE FUSES - 10 PACK

Micro-blade fuses to suit newer model cars. The pack contains one each of 5, 7.5, 25, 30A and two each of 10, 15, 20A.



↑ Current	Multipack	Cat.	Qty 1+	Qty 10+	Qty 25+
5-30A	Pkt 10	SF-2146	\$9.95	\$8.75	\$7.75

MINI BLADE FUSES

They look similar to the standard car blade fuses, except they are smaller. Used in new Holden Commodores, Falcons and more.

Quantity breaks for one type only



↑ Current	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
2A	Grey	SF-1909	\$0.95	\$0.85	\$0.75
3A	Pink	SF-1910	\$0.95	\$0.85	\$0.75
5A	Orange	SF-1912	\$0.95	\$0.85	\$0.75
7.5A	Brown	SF-1913	\$0.95	\$0.85	\$0.75
10A	Red	SF-1914	\$0.95	\$0.85	\$0.75
15A	Blue	SF-1915	\$0.95	\$0.85	\$0.75
20A	Yellow	SF-1916	\$0.95	\$0.85	\$0.75
25A	Clear	SF-1917	\$0.95	\$0.85	\$0.75

STANDARD BLADE FUSES

Quantity breaks for one type only



↑ Current	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
1A	Black	SF-2126	\$0.85	\$0.75	\$0.65
2A	Grey	SF-2127	\$0.85	\$0.75	\$0.65
3A	Pink	SF-2128	\$0.85	\$0.75	\$0.65
5A	Orange	SF-2130	\$0.85	\$0.75	\$0.65
7.5A	Brown	SF-2132	\$0.85	\$0.75	\$0.65
10A	Red	SF-2134	\$0.85	\$0.75	\$0.65
15A	Blue	SF-2136	\$0.85	\$0.75	\$0.65
20A	Yellow	SF-2138	\$0.85	\$0.75	\$0.65
25A	Clear	SF-2137	\$0.85	\$0.75	\$0.65
30A	Green	SF-2139	\$0.85	\$0.75	\$0.65
35A	Purple	SF-2143	\$0.85	\$0.75	\$0.65
40A	Orange	SF-2141	\$0.85	\$0.75	\$0.65

AUTOMOTIVE FUSE PACK

This kit contains around 120 standard size automotive fuses housed in a 6 compartment storage box. 20 x 5A, 10A, 15A, 20A, 25A & 30A fuses are included.



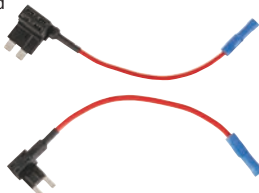
↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SF-2142	\$23.95	\$21.35	\$18.95

WIRE TAPPED BLADE FUSES

DOUBLE BLADE FUSE SOCKET WIRE TAP

If you've ever wanted to install 12VDC devices near or around your dash but have been put off by the need to manually install new wiring and run it into your engine bay this is a great solution. Simply plug the fuse into a socket in your fusebox and you'll have an instant 12VDC power source. A great way to power headrest monitors, extra internal car lighting, gauges, and more. Outputs to a female bullet crimp connector.

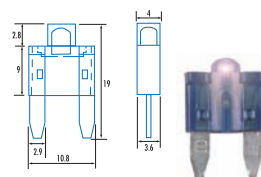
Comes in standard and mini blade fuse models



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Double Blade Fuse Socket Wire Tap	SF-5115	\$4.95	\$4.45	\$3.90
Double Mini Blade Fuse Socket Wire Tap	SF-5125	\$4.95	\$4.45	\$3.90

BLADE FUSES WITH FAILURE LAMP

Not your ordinary blade fuse, these have an integrated lamp which illuminates the moment the fuse blows. This makes finding that blown fuse a cinch, especially when the fuse is in a hard to get location, like under the car dashboard. They don't cost much either, so they are a very worthwhile investment.



MINI BLADE FUSES WITH FAILURE LAMP

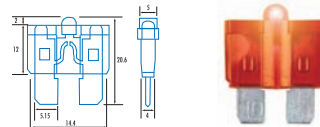
- Ideal for circuits up to 32VDC
- 19(H) x 10.8(L) x 4(W)mm approx

Quantity breaks for one type only

↑ Current	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
3A	Pink	SF-5070	\$1.30	\$1.15	\$1.01
5A	Orange	SF-5072	\$1.30	\$1.15	\$1.01
7.5A	Brown	SF-5074	\$1.30	\$1.15	\$1.01
10A	Red	SF-5076	\$1.30	\$1.15	\$1.01
15A	Blue	SF-5078	\$1.30	\$1.15	\$1.01
20A	Yellow	SF-5080	\$1.30	\$1.15	\$1.01
25A	Clear	SF-5082	\$1.30	\$1.15	\$1.01
30A	Green	SF-5084	\$1.30	\$1.15	\$1.01
5-30A	Pkt 6	SF-5085	\$6.95	\$6.25	\$5.50

STANDARD BLADE FUSES WITH FAILURE LAMP

- Measures: 20.6(H) x 14.4(L) x 5(W)mm approx



Quantity breaks for one type only

↑ Current	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
3A	Pink	SF-5020	\$1.20	\$1.05	\$0.95
5A	Orange	SF-5022	\$1.20	\$1.05	\$0.95
10A	Red	SF-5026	\$1.20	\$1.05	\$0.95
15A	Blue	SF-5028	\$1.20	\$1.05	\$0.95
20A	Yellow	SF-5030	\$1.20	\$1.05	\$0.95
30A	Green	SF-5034	\$1.20	\$1.05	\$0.95
5-30A	Pkt 6	SF-5035	\$5.95	\$5.25	\$4.75

BLADE & MINI BLADE PULLING TOOL

These handy fuse pullers make easy work of exchanging blown fuses. The device is suitable for both micro and mini blade fuses.

- Dimensions: 63(L) x 20(W) x 5(D)mm



NEW 2015

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Fuse Puller	TH-1973	\$1.95	\$1.75	\$1.55

BLADE FUSE HOLDERS

30A IN-LINE BLADE FUSE HOLDER

Accepts standard car type blade fuses. Supplied with heavy duty cable in a loop. Simply cut and join to existing cable.

- Low volt DC only



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard	SZ-2040	\$2.95	\$2.60	\$2.30

30A PANEL MOUNT BLADE FUSE HOLDER

Panel mount for auto or marine applications. Takes standard blade fuses, rated for 12VDC 30A max. Cover included



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard	SZ-2046	\$3.95	\$3.45	\$3.15

30A IN-LINE BLADE FUSE HOLDER WITH FAILURE LAMP - WATER RESISTANT

These fuse holders accept ordinary blade fuses and have an integrated lamp that will light up when the fuse blows, making it easy to find the offending fuse. This is especially useful if the fuse is in a difficult or crowded location. They are supplied with 110mm leads and available to suit standard blade and mini-blade fuses.

- 30A max rating
- Ideal for circuits up to 32VDC



↑ Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard	SZ-2042	\$4.95	\$4.45	\$3.90
Mini Blade	SZ-2043	\$4.95	\$4.45	\$3.90

BLADE FUSE HOLDERS (CONTINUED)

30A BLADE FUSE HOLDER WITH SCREW TERMINALS

This blade fuse holder with in-built screw terminals provides a simple wiring solution to situations where circuit protection is required.

- Current: 30A maximum
- Dimensions: 35(L) x 32(W) x 6(D)mm



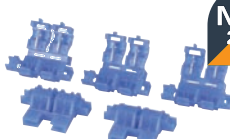
NEW
2015

Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard 30A	SZ-2044	\$5.95	\$5.50	\$4.75

20A SELF CRIMPING BLADE FUSE HOLDERS - PACK OF 5

These are very simple blade fuse holders to install. The self crimping feature is easy to use and saves on installation time. No wire stripping or twisting required. No special tool required; just push in the wire and squeeze.

- Supplied as a pack of 5
- Dimensions: 35(L) x 35(W)mm while open



NEW
2015

Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard 20A Pack of 5	SZ-2049	\$3.95	\$3.55	\$3.15

30A WATERPROOF BLADE FUSE HOLDER WITH LONG TRANSPARENT COVER

Quality transparent waterproof blade fuse holder. They are long enough to accept the circuit breaker blade fuse replacement models. The transparent cover allows you to inspect if a manual c/b has tripped, or able to see if an LED fuse has illuminated. This fuse holder provides extra protection against water and dust, ideal for marine applications.

- Dimensions: 65(L) x 25(W) x 15(D)mm



NEW
2015

Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard 30A Waterproof	SZ-2047	\$6.95	\$6.25	\$5.50

30A STACKABLE BLADE FUSE HOLDER (IN-LINE STYLE)

These fuseholders accept standard blade fuses. They slide together if more than one is required, so you could have a bank of these mounted in your car. They have a cap over the front which makes them look very neat and tidy.

- Handle 30 amps.
- Supplied with a wire loop - can be cut to suit
- Low volt DC only
- Dimensions: 41(L) x 24(H) x 10(W)mm



Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard 30A	SZ-2045	\$3.95	\$3.45	\$3.15

6 WAY AUTOMOTIVE FUSE BOX

Fits six standard car blade fuses. Fibreglass reinforced nylon base with splashproof polycarbonate cover.

- 32VDC max
- 15A/circuit max
- 45A/block max
- 6.3mm QC terminals
- Measures 112(L) x 46(W) x 40(H)mm



Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard 6 Way	SZ-2002	\$12.95	\$11.35	\$10.35

10 WAY BLADE FUSE BLOCK WITH LED INDICATORS

Perfect for automotive or marine applications. Features a common supply rail and includes a removable protective cover and LED indicators for each fuse.

- 10 way
- Dimensions: 95(L) x 85(W) x 36(H)mm
- Input: 100A Max
- Output: 30A Max Per Circuit

Fuses not included



Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard 10 Way	SZ-2008	\$19.95	\$17.70	\$15.70

10 WAY WEATHERPROOF FUSE BLOCK WITH LED INDICATORS

This 10-way weatherproof fuse block is perfect for marine applications, keeping fuse and wiring connections well protected from corrosion. Each fuse socket has an LED indicator to give you quick indication of blown fuses, and there are also a number of slots to fit spare fuses. Designed for panel mount applications.

- Dimensions: 125(W) x 89(H) x 47(D)mm

Fuses not included (without cover)



VIDEO

Type	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard 10 Way	SZ-2001	\$29.95	\$26.90	\$23.70

MODULAR DESIGN NEGATIVE BUS BAR & BLADE FUSE BLOCK

NEW
2015

These modular design negative bus bar and blade fuse holder series are ideal for marine and auto applications. These two models can be combined to make four popular fuse blocks depending on requirements. Each fuse block enables 6 fused circuits; mount two units neatly together to enable 12 fused circuits, in addition you can mount the 12P negative bus bar to either option just mentioned or use it alone as required. See our website for images of how the system works. These fuse blocks come with blown fuse indication LEDs and transparent cover with recessed areas for label stickers. The assembly process is quite easy and can be done using the supplied instruction manual.



- Accepts automotive blade fuses (ATP/ATC/ATO)
- Modular design saves shelf space
- Transparent cover with recessed areas
- 60 pieces assorted label stickers set included
- Storage for 2 spare fuses (for each 6P blocks)
- LED indication for blown fuses

Specifications	SZ-2011	SZ-2013
Voltage rating	32VDC max	32VDC max
Amp rating per branch	30A (screw terminals)	30A (screw terminals)
Maximum cumulative Amp	100A per block	100A per block
Terminal stud size	M5 (3/16")	M5 (3/16")
Screw size	M4 (5/32") x 12pcs	M4 (5/32") x 6pcs
Dimensions	86(W) x 57(L) 41(H)mm	86(W) x 78(L) 41(H)mm

Type	Cat.	Qty 1+	Qty 10+	Qty 25+
32VDC	SZ-2011	\$19.95	\$17.95	\$15.70
32VDC	SZ-2013	\$34.95	\$31.45	\$27.90

BUS BARS

150A INSULATED BUS BAR

This quality bus bar features a raised insulating base that isolates the bus bar from earthed or other live chassis. It features 2 x 5mm bolted terminals for connecting main power feeds, and 10 screw terminals for connecting lower current feeds of up to 10A each. Total current capacity is 150A, and is suitable for 12-32V wiring. 2 countersunk screw holes for 5mm metric fasteners.



- Not suitable for 240V active circuits
- Dimensions: 145(L) x 30(W) x 40(H)mm

Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	SZ-2012	\$14.95	\$13.35	\$11.70



GOLD FUSES, FUSE HOLDER & GOLD DISTRIBUTION BLOCKS SEE PAGE 251

ANL WAFER FUSES & HOLDERS

GOLD ANL WAFER FUSES

These wafer fuses feature gold finish screw-down contacts for maximum current transfer and conductivity and are designed for really high current applications such as for car audio amplifiers, etc.

- Use with our SZ-2075 - Inline Wafer Fuseholder.
- 5 current ratings available.



AMP-KING

Current	Cat.	Qty 1+	Qty 4+	Qty 10+
80A	SF-1990	\$8.95	\$7.95	\$6.95
100A	SF-1992	\$8.95	\$7.95	\$6.95
150A	SF-1995	\$8.95	\$7.95	\$6.95
200A	SF-1997	\$8.95	\$7.95	\$6.95
250A	SF-1999	\$8.95	\$7.95	\$6.95



FULL RANGE OF GLASS FUSES
M205 3AG 5AG SEE PAGE 116

ANL IN-LINE FUSE HOLDER

A solid brass ANL inline fuse holder that is nickel plated. A great looking and functional fuse holder that is suitable for high end car audio installations.

- Dimensions: 95(L) x 50(W) x 36(H)mm



Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	SZ-2078	\$14.95	\$13.45	\$11.95

LET'S POINT YOU TO THE RIGHT PAGE...

Power & Smart Energy

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JUMP STARTERS

It was not until battery manufacturers came up with small (generally) lead-acid batteries with low internal impedance that enabled these products to emerge with such battery technology, it was possible to make a portable power source in a reasonably lightweight package which had enough grunt to be useful. Up until that point you had to borrow a full-size battery – or a nearby vehicle to jump-start a car or truck. Even if that jump-start capability was all they were, they'd be worth having.

12V 3-IN-1 JUMP STARTER WITH SPIRAL WOUND BATTERY

This versatile jump starter features a built-in 5.5A spiral wound battery that does not leak, has longer storage time (up to 5 times longer than the lead acid battery) and can operate under temperatures between -40 to 70°C. It also features a 12VDC cigarette lighter socket for operating 12V appliances and a 5VDC 2.1A USB socket for charging and operating USB devices. The LCD display not only displays the battery capacity of the jump starter, it will also display the capacity of the vehicle battery when connected.

- Built-in 12V 5.5A Spiral battery
- 300A cranking jump start power
- 1 x 12VDC cigarette lighter socket for running 12V appliances
- 1 x 5VDC 2.1A USB socket for charging USB devices
- LCD display to show the battery level of both car and the jump starter.
- Mains charger included
- Jump start lead length: 550mm
- Dimensions: 205(H) x 210(W) x 95(D)mm



NEW
2015

1
YEAR WARRANTY

Due June 2015

↑ Type	Voltage	Cranking	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
3-in-1	12V	300A	MB-3730	\$99.95	\$89.95	\$79.95

12V 7-IN-1 JUMP STARTER POWER STATION

A versatile jump starter that incorporates a raft of essential functions for general automotive, camping and emergency situations. Tucked in on either side are two tough insulated battery clamps for jump starting a vehicle or charging a 12VDC battery. The front panel features 2 x 12VDC cigarette lighter sockets for operating 12V appliances, a 5 LED powered work light and two digital display indicators for remaining battery capacity and air pressure. There is also a DC socket as well as an LED polarity indicator to warn if your connections are reversed. An extremely useful 260PSI (Displays 99 Max) air compressor is also built into the unit so you can inflate a flat car tyre or other inflatables, by simply setting the pressure on the digital gauge and the compressor will automatically inflate to the set pressure. Inflating pressure can be viewed from the front digital readout and switched between PSI and BAR. The unit also features a 400W inverter output at the rear and two 5VDC USB sockets with combine power of 4.5A for charging and operating Smartphones, Tablets, or other USB devices. Black rubber handle and corners will protect against common knocks and accidental drops. Built-in Battery Diagnostic Tester which provides a percentage of charge and battery health of the built in battery and the battery it connects to.

- Automatic air compressor for pumping tyres and other inflatables
- AC and DC chargers included
- 12V 18Ah SLA battery inside
- 400W (800W surge) modified sine wave Inverter - 230VAC outlet at rear for powering laptops, etc
- 5 LED work/map light at front panel
- Charging and air compression dial indicators
- 2 x 12VDC sockets for running 12V appliances
- 2 x 5VDC USB sockets with 4.5A (2.1A + 2.4A) combine power for charging and operating USB devices.
- Built-in Battery Diagnostic Tester which provides a percentage of charge and battery health of the built in battery and the battery it connects to.
- DC charging takes approximately 12 hours, AC charging takes approximately 34 hours
- Charging jack
- Built in air cooling fan
- Battery level indicator
- 600A cranking, 900A Max
- Dimensions: 295(H) x 273(W) x 215(L)mm



Will start most diesel 4WD's

Due June 2015

1
YEAR WARRANTY

↑ Type	Voltage	Cranking	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
7-in-1	12V	600A	MB-3732	\$199.00	\$178.95	\$158.95

JUMP STARTERS & BATTERY TESTER

JUMP STARTERS (CONTINUED)

12V COMPACT HIGH PERFORMANCE JUMP STARTER WITH LIFEPO4 TECHNOLOGY

Using modern LiFePO4 technology this compact device is small enough to keep in a glove box but able to jump start heavy engines such as a modified 350cu.inch Chevy V8, a 6.0L V8 SS Ute, a 4.0L 6cyl Landcruiser, and a 3.0L diesel Hilux. It also features an LED torch and 2.1A USB charging port - so you can use it as a power bank too. Microprocessor controlled with protected against reverse polarity, short circuit, and low battery voltage.

- 12.8V 3Ah LiFePO4 battery
- SAFE Lithium battery technology
- Will work on a flat car battery down to 2.0V
- Computer controlled
- Detachable output leads
- LED battery status indicators
- Mains and car charger included
- LED torch

Will start most diesel 4WDs!



NEW
2015

TECH TALK!!

LiFePO4 EXPLAINED

Lithium iron phosphate (LiFePO4) is a technology proving to overcome the safety concerns that exist with Lithium ION (Li-ION) and other lithium battery technologies because it is chemically more stable. In particular, LiFePO4 is able to deliver extremely high surge currents without risk of the battery chemistry breaking down (and the battery exploding), holds a charge for a very long time, and is far more stable when exposed to high heat and other environmental conditions.

1
YEAR WARRANTY

Specifications	MB-3750
USB charging output	5VDC 2.1A
Continuous jump start current	> 240A
Operating temperature	-20°C - 55°C
Storage temperature	-20°C - 70°C
Output lead length	250mm (per lead)
Dimensions	205(L) x 100(W) x 55(H)mm

Type	Voltage	Cranking	Cat.	Qty 1+	Qty 2+	Qty 4+
2-in-1	12V	240A	MB-3750	\$199.00	\$178.95	\$158.95

24V HEAVY DUTY JUMP STARTER/POWER BANK

A 24V Heavy Duty Jump Starter with a high-capacity Li-Po battery built-in, capable of delivering up to 400A output. It features a power bank function with a USB output that can charge 5V devices up to 2.1A, suitable for Smartphones and Tablets. The LCD provides useful information such as battery status and the output voltage. This versatile unit also contains a front facing 3W LED light and a 49 LED worklight that fold opens from the side. It also features a user selectable 12VDC or 19VDC output, up to 3.5A (65W) via a common DC output lead with interchangeable plugs, suited for charging laptops or other similar items. It is also packed with safety features that include overload, over-temperature, short-circuit and reverse polarity protection.

Supplied with a battery clips, In-car and home mains charger and interchangeable DC plugs.

Specifications	MB-3752
Jump Starter output	24V, 400A
USB output	5V, 2.1A
DC output	12V / 19V 3.5A (65W)
Charge input	12VDC/2A
Dimensions	190(L) x 150(H) x 90(W)mm
Weight	1.3k

Will start a Large Cruiser Boat!



Due September 2015

NEW
2015

1
YEAR WARRANTY

Type	Voltage	Cranking	Cat.	Qty 1+	Qty 2+	Qty 4+
3-in-1	24V	400A	MB-3752	\$399.00	\$359.00	\$319.00

BATTERY TESTER

12VDC LEAD ACID BATTERY TESTER

This battery tester quickly, easily, and accurately measures the actual cold cranking amps capability of the vehicle starting battery. It tests most automotive cranking lead acid batteries, including an ordinary lead acid battery, AGM flat plate battery, AGM spiral battery, and GEL battery, etc. It can identify a battery with bad cells, has reverse polarity protection, and meets major battery testing standards such as CCA, BCI, CA, MCA, JIS, DIN, IEC, EN, SAE, GB. The handy device features an LCD display to indicate the results, a menu tab and clips to connect the battery tester to the vehicle's battery.

- Voltage Measure Range: 6-30VDC
- Dimensions: 125(L) x 70(W) x 25(H)mm



Note: Battery not included

NEW
2015

1
YEAR WARRANTY

Voltage	Cat.	Qty 1+	Qty 3+	Qty 6+
12VDC	QP-2261	\$79.95	\$71.95	\$63.95

LET'S FIND EVERYTHING YOU NEED!

HEAVY DUTY 400A JUMPER LEADS WITH LED ILLUMINATION

A super handy set of jumper leads to leave in the back of the car! Each battery clamp has a LED light built in, powered by built-in batteries, so even in the dark you can find your way around the engine bay. The jumper leads are fitted with a voltage surge protector to keep your vehicle electronics safe. Supplied in a clear plastic carry case.

- Voltage surge protection
- 400A current rating
- 8 x LR44 button batteries included
- 3m long



NEW
2015

1
YEAR WARRANTY

EXTRA-HEAVY DUTY 700A JUMPER LEADS WITH LED ILLUMINATION

These extra-heavy duty jumper leads have battery clamps with a helpful LED light built in, so you can find the battery terminals even in pitch black darkness. Rated at 700A, they are suitable for higher CCA (cold cranking amp) loads on big V6s, V8s and diesel 4WDs. At 4.5m long, they have that extra bit of length over your typical jumper leads, which always makes the difference when dealing with large 4WD engine bays. Fitted with a surge protector to protect sensitive electronics, and supplied in a handy clear plastic carry case. LEDs powered by built in batteries (included).

- Voltage surge protection
- 700A high current rating
- 8 x LR44 button batteries included
- 4.5m long



NEW
2015

1
YEAR WARRANTY

Type	Cat.	Qty 1+	Qty 3+	Qty 6+
400A 3m long	WH-6012	\$29.95	\$26.95	\$23.70
700A 4.5m long	WH-6014	\$69.95	\$62.95	\$55.95

SWITCHMODE MULTI-STATE BATTERY CHARGERS

High tech SLA battery chargers for automotive, marine, motorcycle, workshop or industrial use. All feature switchmode operation, multi-stage maintenance and charging, near-bulletproof performance and microprocessor control. All are IP rated for use in workshops and hostile environments.

- 3 year warranty
- Short circuit & reverse polarity protection
- Anti-spark protection
- Dust & splash proof (IP65 rated)
- Standby, fault, mode selection & charging LED indicators
- Mounting feet for wall mounting
- Safe to leave connected for months at a time

TECH TALK!

MULTI-STATE CHARGERS

All-in-one chargers which have multiple charge settings to suit different sized batteries and charging requirements. Capable of recharging the battery and maintaining the charge state indefinitely, they are particularly well suited to being continuously connected to a battery. Some models also have additional functions such as rapid boost charging and can also be used as a general purpose high current power supply.

6/12V 750mA 3-STATE

3-stage set-and-forget maintenance charger. Automatically diagnoses, recovers and recharges 6 or 12 volt lead-acid, gel, and AGM rechargeable batteries for boats, motorcycles etc. Maintains your battery for months and extends battery life by constantly monitoring battery condition and bulk, trickle or maintenance charges accordingly. Handy storage hooks for alligator clips keep the lead out of the way when not in use.

Specifications	MB-3603
Output voltage	7.2, 14.4VDC
Charging current	750mA max
Efficiency	>75%
Ripple	150mV max
Back current drain	<35mA
Capacity	1.2 - 20Ah
Rating	IP65
Dimensions	110(L) x 62(W) x 45(H)mm

POWERTECH PLUS



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
6/12V 750mA	MB-3603	\$49.95	\$44.90	\$39.90

12V-3.8A 5-STATE

Three different modes of operation make this charger suitable for all types of SLA batteries - wet cell, gel cell, and AGM, ranging in capacity from 1.2Ah to 120Ah. The microprocessor controlled circuitry will diagnose the battery's state of charge, provide the correct charging mode, eventually switching over to float/maintenance charge to keep the battery at full charge & eliminate battery sulphation. This charger can also recover slightly sulphated batteries as low as 7.5V, & charge batteries in sub-zero temperatures. The interchangeable lead sets allows a charging lead to be permanently attached to your battery for quick connection/disconnection of the charger - a must have for motorbikes with hard to reach battery terminals or that classic car that spends most its life in the garage! 100% safe to leave connected to your vehicle's battery for months.

- 3 different charging modes
- Mode 1: 14.4V / 0.8A, for motorcycle batteries
- Mode 2: 14.4V / 3.8A, for car batteries
- Mode 3: 14.7V / 3.8A, for AGM batteries and sub-zero temperatures

Specifications	MB-3604
Rating	IP65
Dimensions	175(L) x 60(D) x 45(H)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
12V 3.8A	MB-3604	\$89.95	\$80.95	\$71.95

12V-7.0A/24V-3.5A 7-STATE

The bigger brother of MB-3604, this is a 5-stage full maintenance charger for 12 and 24V lead acid - SLA, gel and AGM batteries with bonus features. Fully automatic charging modes with diagnostic and recovery features, it also features a power supply mode where it can act as a 13.6VDC 5A power supply. Unrivalled versatility, offers six different modes of operation:

- 14.4V/7A Charge - for 12V lead acid batteries
- 14.7V/7A Charge - for 12V AGM batteries
- 28.8V/3.5A Charge - for 24V lead acid batteries
- 29.4V/3.5A Charge - for 24V AGM batteries
- 16V/1.5A BOOST - to recover severely discharged 12V batteries
- Interchangeable lead set (alligator clips and ring terminal leads included)
- Overload, short circuit, open circuit, anti-spark and reverse polarity protected
- Suitable for 12 and 24V batteries (automatic detection)

Specifications	MB-3606
Input voltage	220 - 240VAC
Output voltage	14.4, 14.7V, 28.8V, 29.4V, 16V, or 13.6VDC
Input current	400mA max
Charging current	12V-7A, 24V-3.5A
Efficiency	>75%
Ripple	150mV, 300mA max
Back current drain	<5mA
Rated	IP65
Dimensions	200(L) x 85(W) x 50(H)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
12/24V 7A / 3.5A	MB-3606	\$169.00	\$151.95	\$134.95

12V-15A/24V-7.5A 9-STATE

Nine step fully automatic 15 amp high current charger with maintenance charging of all types of SLA batteries as well as lead-calcium batteries from 50 - 250Ah, and either 12V or 24V. The electronics are fully microprocessor controlled and protected against user error, so is totally safe to leave connected for months at a time. This charger will also charge in sub-zero temperatures, will recover sulphated batteries and can be used as a 10A power supply. Also features "boost" modes to recover deeply discharged batteries. The battery output lead has a temperature sensor to automatically compensate charging voltage dependant on temperature, so no matter what the conditions, you will get a full charge into your battery. The output lead is also fitted with Anderson connectors to allow for easy connection to existing wiring or use of the included alligator clips or bolt terminals.

- Short circuit and reverse polarity protection
- Anti-spark protection
- IP65 outdoor rated
- Standby, fault, mode selection and charging LED indicators
- Mounting feet for wall mounting
- Safe to leave connected for months at a time

Specifications	MB-3607
Input voltage	220 - 240VAC
Output voltage	12 or 24VDC
Input current	2A max
Charging current	12V-15A, 24V-7.5A, 12V-Calcium-5A
Efficiency	>75%
Ripple	150mV, 300mA max
Back current drain	<5mA
Rated	IP65
Dimensions	260(L) x 135(W) x 70(H)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
12V/24V 15A/7.5A	MB-3607	\$299.00	\$269.00	\$239.00

BATTERY CHARGERS

MULTI-STATE BATTERY CHARGERS

12V-25.0A/24V-12.5A 9-STATE

Nine step fully automatic 25 amp high current charger with maintenance charging of all types of SLA batteries as well as lead-calcium batteries from 50 - 500Ah, either 12V or 24V. The electronics are fully microprocessor controlled and protected against user error, so is totally safe to leave connected for months at a time. This charger will also charge in sub-zero temperatures, will recover sulphated batteries and can be used as a 5A power supply. Also features "boost" modes to recover deeply discharged batteries. The battery output lead has a temperature sensor to automatically compensate charging voltage dependant on temperature, so no matter what the conditions, you will get a full charge into your battery. For caravan and boat users, it also has a night charge mode: in this silent mode, charging is performed at reduced current with the cooling fans turned off, then returns to normal levels after 9 hours. See our website to download full product info sheet.

Specifications	MB-3608
Input voltage	220 - 240VAC
Output voltage	12 or 24VDC
Input current	4A max
Charging current	12V-25A, 24V-12.5A
Efficiency	>75%
Ripple	150mV, 300mA max
Back current drain	<5mA
Rating	IP65
Dimensions	260(L) x 135(W) x 70(H)mm

Perfect for boats, caravans & motorhomes

See our website to download full product info sheet.



⬆			Cat.	Qty 1+	Qty 2+	Qty 4+
	12/24V	25A/12.5A	MB-3608	\$469.00	\$425.00	\$379.00

12V 15/40A HIGH POWER 4-STAGE WALL MOUNT 240V BATTERY CHARGERS

Tough wall mounted high power battery chargers designed to quickly recharge 12V lead-acid batteries (wet, sealed, AGM, etc) with a high level of efficiency and charge current. They feature microprocessor controlled smart 4-stage charging to ensure battery life is maintained by monitoring and charging the batteries safely, resulting in a charger that is safe to leave connected indefinitely. Thanks to their auto-start feature, they are a fantastic choice for caravan, motorhome or marine applications. Output is fully electrically isolated, and the charger can even be set to operate as a regulated high current power supply. DIP switches allow you to select the charging voltage, and output is via heavy duty screw terminals.

POWERTECH

Specifications	MB-3710 12V 15A	MB-3715 12V 40A
Input voltage	230VAC	230VAC
Bulk/Absorption	14.2VDC / 14.6VDC / 14.8VDC	14.2VDC / 14.6VDC / 14.8VDC
Float charging	13.2VDC / 13.5VDC / 13.8VDC	13.2VDC / 13.5VDC / 13.8VDC
Output current (max)	15A	40A
Advantage boost charging	Yes	Yes
Efficiency	up to 88%	up to 88%
Over charging protected	Max absorption time 6 hours	Max absorption time 6 hours
Output short circuit protected	Yes, with current limiting	Yes, with current limiting
LED Display	Green - Charger on, Green - Float, Yellow - Absorption, Red - Bulk	Green - Charger on, Green - Float, Yellow - Absorption, Red - Bulk
Operating temperature	0 - 40°C	0 - 40°C
Dimensions	205(L) x 130(W) x 70(D)mm	250(L) x 235(W) x 80(D)mm

MB-3710

MB-3715



		Cat.	Qty 1 +	Qty 2 +	Qty 4 +
12V	15A	MB-3710	\$249.00	\$255.00	\$198.95
12V	40A	MB-3715	\$469.00	\$425.00	\$379.00

BATTERY CHARGERS

TECH TALK!

LOW CURRENT CHARGERS

Low current output designed to steadily recharge sealed lead acid (SLA) batteries without causing the battery to overheat and become a swollen mess. As a guideline the charger's current rating should be no more than 10 to 15% of the battery's ampere-hour rating.

6V-600mA & 12V-1000mA

A new range of mains powered Lead Acid battery chargers designed for 6V (MB-3618) and 12V (MB-3619). These intelligent automatic battery chargers stop charging when the battery is full and start to maintain the battery with a 'floating' charge mode. The charger monitors the battery voltage and tops-up the battery to keep it fully charged all the time. This feature allows you to leave the charger connected to the battery without risk of overcharging. It comes with a LED indication for battery charging status. The 2m long cable includes an interchangeable DC plug and Alligator clips.



Specifications	MB-3618	MB-3619
Input	100-240VAC, 60/50Hz	100-240VAC, 60/50Hz
Charging current	600mA	1000mA
Charging voltage	6.0VDC	12.0VDC
Float output voltage	6.8-7.2VDC	14.4VDC
Bulk charge mode voltage	6.0-6.8VDC	14.0VDC
Dimensions	65(L) x 52(D) x 36(W)mm	70(L) x 40(D) x 40(W)mm



⬆		Cat.	Qty 1+	Qty 2+	Qty 4+	
	6V	600mA	MB-3618	\$19.95	\$17.95	\$15.70
	12V	1000mA	MB-3619	\$19.95	\$17.95	\$15.70

2, 6 & 12V 600mA

This fully automatic charger will charge 2V, 6V, and 12V sealed, and standard (car) lead-acid batteries. When the battery is completely charged, the current is automatically reduced to prevent overcharging.

- 600mA charging current
- Short circuit and wrong polarity protected
- Constant charging current
- No charge if battery connected incorrectly
- LED's show charging state

Output lead has battery clips for easy charging. Ideal to trickle charge your car battery while on holidays or keep those SLA batteries charged and in tip top condition.



↑	Approval No.	Cat.	Qty 1+	Qty 2+	Qty 4+
	2V/6V/12V 600mA N19029	MB-3518	\$24.95	\$22.35	\$19.70

6, 12 & 24V 1.2A AUTOMATIC

This switchmode SLA battery charger has an automatic function that cuts the charging current to near zero once the battery is charged, whilst still continuing to monitor battery voltage. Works with 6V, 12V or 24V SLA batteries, and automatically detects the battery voltage ensuring you don't make any mistakes - just connect the charger and it starts automatically. LED indicator shows charging state, with connections made by alligator clips.

- 6V, 12V and 24V charging
- Short circuit and reverse polarity protection
- Automatic cut-out and voltage detection
- Will not charge a completely flat battery
- Dimensions: 100(L) x 45(W) x 20(D)mm



↑		Cat.	Qty 1+	Qty 2+	Qty 4+
	6V/12V/24V 1.2A	MB-3527	\$34.95	\$31.45	\$27.90

BATTERY CHARGERS (CONTINUED)

6V & 12V, 8A HEAVY DUTY WITH TRICKLE CHARGE

This charger is suitable for both 6 and 12 volt car, boat, motorcycle and lawnmower batteries. Featuring 4-stage LED charge indicators, the charger can be switched between trickle or heavy duty charge rates and is recommended for casual, domestic charging tasks. The unit is housed inside a tough plastic case with carry handle, is double insulated and features overload and reverse battery protection. The battery leads are terminated to heavy duty alligator clips on a 1 metre length of cable.

- Complies with Australian Electrical Safety Regulations.



		Cat.	Qty 1+	Qty 2+	Qty 4+
6V/12V	8A	MB-3522	\$64.95	\$58.50	\$51.95

12V 10A INTELLIGENT SWITCHMODE 5 STAGE BATTERY CHARGER

A robust 12V battery charger packed with useful features to safely charge and maintain the life of your batteries. The front control panel allows you to control the battery type being charged (see below for supported types), the desired charge rate, the display mode (current, battery voltage, charge percentage). It will also indicate if there is a battery fault or if the polarity is reversed in which case the charging will immediately stop to protect the battery. Features positive/negative fly leads with clips that are neatly tucked away into a compartment at the rear of the unit.

- Short circuit protection
- Voltage compensation
- Overheat protection
- Polarity reversal protection
- Fan cooled
- Faulty battery indicator
- Charging current: 2A (Low rate), 6A (Normal rate), 10A (High rate)
- Input voltage: 220VAC-240VAC
- Supported battery types: WET/Flooded, GEL, AGM, MF, VRLA rechargeable batteries
- Dimensions: 230(H) x 170(W) x 140(D)mm



TECH TALK

There are 5 stages of operation:

- Soft Start** - tests the battery condition. A severely discharged battery needs charging with a reduced current until the voltage reaches 12V.
- Bulk charging** - delivers most of the charge (60-80%). The charger delivers maximum current until the terminal voltage has risen to the set level.
- Absorption** - completes the charging up to nearly 100% at a constant voltage. The current tapers off as the battery reaches full capacity.
- Float** - maintenance charging at constant voltage, keeping battery at 100% charge.
- Pulse** - long term maintenance charging. Cycles the battery between 80 and 100% charge for maximum battery life. The battery receives a pulse, starting a new charge cycle, when voltage drops to set limit. The charger can be connected for months keeping the batteries fresh.

		Cat.	Qty 1+	Qty 2+	Qty 4+
12V	10A	MB-3625	\$119.00	\$106.95	\$94.95

6V/12V/24V 15A INTELLIGENT BATTERY CHARGER

An intelligent battery charger suitable for flooded and gel lead acid batteries including deep cycle batteries at 6V, 12V or 24V. The microprocessor controlled unit provides 4 stages of charging, Soft Start, Bulk Charge, Absorption and Float which assists in the batteries life expectancy and performance. An auto detection feature provides a user friendly experience, which can be pre-programmed or manually set for greater control. Should a blackout occur or AC input power be lost during a charging operation the memory function will resume charging once power is re-established. Other features include temperature/voltage compensation, reverse polarity/short circuit protection and a battery status indicator. Ideal for cars, motorcycles, caravans and boats with battery capacities between 20-200Ah. It's also ultra-portable with a handy storage pocket in the back for the leads.

- Memory function
- Temperature controlled fan
- LED battery status display
- Temperature and voltage compensation

- Protection:
- Anti spark
 - Short circuit
 - Reverse polarity
 - Over heating/current/voltage



Specifications	MB-3623
Input	220 - 240VAC, 2.5A
Output	15A @ 12V 7A @ 12V/24V 2A @ 6V/12V/24V
Dimensions	230(H) x 170(W) x 140(D)mm

		Cat.	Qty 1+	Qty 2+	Qty 4+
6V/12V/24V	15A	MB-3623	\$149.00	\$133.95	\$118.95

TECH TALK

HIGH CURRENT CHARGERS

Higher current chargers steadily recharge larger lead acid batteries such as car, marine or high capacity deep cycle batteries. Available in simple models which need to be monitored manually ie. disconnected when the battery is fully charged, and automated models which monitor battery condition. Automated models have higher charge rates and improve battery life as their control systems prevent overcharging. Jaycar does not stock simple chargers, only automatic types.

BATTERY CHARGE & BOOST CONTROLLERS

12V 4 STAGE 40A DC TO DC BOOST CHARGER

A significant voltage drop can occur in dual battery systems where the auxiliary battery is some distance from the main battery. A DC to DC boost charger is the solution to that problem. This DC to DC boost charger is capable of taking an 8-16VDC input voltage, and giving a stable, regulated 13.8V/14.4V 4-stage charger output to give your auxiliary battery a full 100% charge. Even if the power is coming down a long cable and has suffered some voltage drop, this charger will boost the voltage back up. It can also be configured to work as a 13.8V power supply, again with the ability to boost voltage. Charge voltages are adjustable to suit different types of lead acid batteries via some DIP switches, and input/output connections are made with heavy duty terminals.

- Output current is rated at 40A to ensure a quick charge.



Specifications	MB-3690
Input voltage	8-16VDC
Output voltage	13.8V
Output current	40A
Bulk/absorb charge	14.6V, 14.8V
Float charge	13.2V-13.8V selectable
Power supply mode	13.8Vdc
Efficiency	85-90%
Weight	2.3kg
Dimensions	220(L) x 150(W) x 70(H)mm

		Cat.	Qty 1+	Qty 2+	Qty 4+
12V	40A	MB-3690	\$249.00	\$225.00	\$198.95

BATTERY-TO-BATTERY DC CHARGE CONTROLLER 12/24V 140A

This advanced programmable Battery-to-Battery DC Charge Controller can be used in three different and distinct ways making it a genuine battery management control system. Firstly, it can be used as a bi-directional, fully programmable battery to battery charge controller.

Alternatively, it can be used as an independent, fully programmable DC load controller low voltage disconnect/re-connect with programmable twin timer functions. Or finally, it can be used in conjunction with the SuperCombi power management system as the DC load controller or DC generator input. Being fully programmable via the large LCD and simple intuitive front panel controls, the possible applications for this little device are vast and the programmable flexibility allows for even the more abnormal installations - even if the battery is mounted right up the other end of your caravan with 20m of cable from the DC charging source, you can adjust the voltage set points to compensate for voltage drop of the cables.

- Suitable for 12V or 24V systems, up to 140A maximum current.

SEE PAGE 364 FOR MAINS AUTO TRANSFER SWITCH

Specifications	MI-5282
Operating voltage	9-35VDC
Rated continuous current	100A/12V, 70A/24V
Rated intermittent current	140A/12V, 100A/24V
Dimensions	111(W) x 90(H) x 58(D)mm
See website to download user manual.	

		Cat.	Qty 1+	Qty 3+	Qty 6+
140A DC Switch Controller		MI-5282	\$229.00	\$209.00	\$182.95



FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

BATTERY ISOLATORS & ACCESSORIES

BATTERY DISCONNECTS & ACCESSORIES

BATTERY ISOLATION SWITCHES

High current rated battery isolation switches for high power applications. Often fitted to boats, trucks, motor homes and other battery based power systems to allow for quick and easy electrical isolation of the battery for protection against discharge, fire and other safety risks. Each switch features high quality construction with large bolt-down terminals for electrical connection.

HIGH QUALITY 120A

- Large removable key actuator
- Continuous rating: 120A @ 12V
- Surge rating: 500A, 60mm diameter mounting plate

PROFESSIONAL 500A

The switch handle features a tight and secure spring loaded actuation, locking the switch into the ON position and requiring you to pull the handle out to turn it off, avoiding accidental battery isolation. Features heavy gauge M12 brass bolt terminals, cast metal body for extra strength and durability, and is also supplied with a right angle mounting bracket.

- Continuous rating (6-48VDC): 500A
- Max rating (6-48VDC): 2000A (10 sec)
- Dimensions: 70(D) x 100(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
12V 120A	SF-2245	\$17.95	\$15.95	\$14.35
12V 500A	SF-2247	\$49.95	\$44.90	\$39.90

BATTERY SWITCHES WITH ENCLOSURE

Simple 2 and 4 position battery switches for controlling battery power on your boat, caravan, or other high current battery system. The 2-position version is a simple on/off turn switch. The 4-position model allows you to switch power on for 2 batteries at a time, or for each individually. Ideal if you have one battery for starting the engine and another for auxiliary electrical equipment.

- Durable design, with large indented grips that won't slip under wet hands.



Specifications	SF-2246	SF-2248
Continuous rating	275A	175A
Intermittent rating	455A	300A
Operation	On/Off	Battery 1 on, Battery 2 on, Both batteries on, both batteries off
Operating range	8-50VDC	6-32VDC
Stud size	2x10mm	2x10mm
Dimensions	75(H) x 72(W) x 72(L)mm	134(L) x 134(W) x 71(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Position	SF-2246	\$29.95	\$26.90	\$23.70
4 Position	SF-2248	\$39.95	\$35.90	\$31.90

BATTERY ISOLATOR WITH REMOTE CONTROL DISCONNECT

This battery isolator will prevent your battery from going flat by automatically disconnecting the battery before reaching dangerously low levels, ensuring there is enough power to get your vehicle started. The remote controls supplied also acts as an immobiliser by cutting battery supply to the vehicle. A brilliant device that will save you a lot of money and headaches. Simple to install, it is supplied with two remote controls.

- Works with alarm systems
- Suitable for 12VDC batteries
- Dimensions: 200(W) x 150(L) x 30(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12V	MB-3679	\$79.95	\$71.95	\$63.95

STORE DETAILS

For store locations and opening hours see the back cover of this catalogue or download our "Store Locator App".



12V 140A DUAL BATTERY ISOLATOR KIT WITH WIRING

Allows two batteries to be charged from your engine alternator at the same time. When your engine is on and the start battery is sufficiently charged the isolator kit will begin charging the second (auxiliary) battery simultaneously. When the voltage of the start battery drops (i.e. the engine is stopped) the isolator kit disengages from charging the auxiliary battery. This isolates the start battery and eliminates the possibility of draining it, ensuring that you always have enough charge to start your engine, and also protects sensitive electronic equipment powered from the auxiliary battery from harmful engine start-up spikes. Suitable for 12VDC Marine, 4WD, caravan and solar applications. Dual Battery Isolator available as a standalone unit - see MB-3685

- Emergency override feature
- LED status indicator

KIT INCLUDES:

- 1 x Dual Battery Isolator with mounting screws
- 1 x 6 metre length of 10mm square red cable terminated at both ends
- 1 x 600mm black earth cable
- 2 x Positive Marine battery terminals
- 1 x Negative Marine battery terminal
- 1 x SC25-10 Copper crimp lug
- 2 x 16-8 Copper crimp lugs
- 2 x Red heat shrink
- 1 x Insulated blue ring terminal
- 6 x 200mm cable ties



Specifications	Both
Continuous rating	140A
Intermittent rating	170A
Voltage rating	12VDC (max 15VDC)
Cut in voltage	13.7VDC
Cut off voltage	12.8V
Isolator dimensions	67(L) x 67(W) x 53(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
VSR with Wiring Kit	MB-3686	\$149.00	\$133.95	\$118.95
VSR without Wiring Kit	MB-3685	\$79.95	\$71.95	\$63.95

120A 12/24VDC PROGRAMMABLE DUAL BATTERY ISOLATOR

This 120A 12/24VDC Programmable Dual Battery Isolator can be fine tuned to meet your vehicle's specific application. Often the alternator, main battery, house battery and load change with time, so this device allows you to fine tune key voltages and delay time set points, and constant monitors each battery to ensure the optimum charging current.

The reliable and efficient MOSFET switching circuitry has very little voltage loss, which results in much less generated heat compared to diode based isolators.

Features:

- Ignition Control
 - N.O & N.C contacts
 - Manual Override mode
 - Programmable parameters:
- Connect Voltage: 9.2 - 16VDC/18.4 - 32VDC
Isolate Voltage: 9 - 15.8VDC/18 - 31.6VDC
Alert Voltage: 9 - 15.9VDC/18 - 31.8VDC
Connect/Isolate/Alert Delay: 1 - 250 seconds



Specifications	MB-3688
Operating Voltage	9 - 17VDC/18 - 34VDC
Continuous Contact Current	120Amp
Dimensions	90(L) x 90(W) x 85(H)mm
Weight	0.6kg

↑		Cat.	Qty 1+	Qty 4+	Qty 10+	
	12/24V	120A	MB-3688	\$199.00	\$178.95	\$158.95

TECH TALK

WHEN IS A LEAD-ACID BATTERY DEAD?

Lead acid battery technology has been around for about 150 years. The technology is as reliable as a sheep dog, BUT it has its limits. Lead Acid Batteries basically love work. The more you start something with them and then charge them up, the more they like it. They do, however, eventually die. If you leave them idle for a long time or leave them discharged without recharging, you can easily kill them.

The voltage difference between a good battery and a dead (or "dodgy") one is less than a volt!

If you have a battery with a terminal voltage of 11.8V or less, it is probably history. You can try to recharge it, maybe add some INOX (page 308), but, really you won't be able to trust it.

Get a new battery.

BATTERY MONITORING

DIGITAL DC POWER METERS

An ideal addition to any low voltage DC system this digital power meter features real time display of the voltage, current draw, and power consumption. Once running it also stores minimum and maximum voltage, current, and power, together with cumulative amp hours and watt hours consumed by the connected equipment. Suitable for DC systems from 5 to 60 volts and available in two versions for inline connection or remote connection with a separate current shunt. Both meters are mountable using the included snap-in bracket or magnetically on any ferrous surface and can be connected to a PC using the MS-6174 USB data adaptor (sold separately).

- Dimensions: 45(W) x 41(L) x 23(D)mm
- Operating current: 12mA peak
- Measurement Specifications:
- Voltage Range: 5-60VDC (0-60VDC with external DC power source)
- Wattage Range: 0-12,000W

Logging Specifications:

- Cycle Time: 3 minutes
- Maximum Amp Hours: 99,999Ah
- Maximum Kilowatt Hours: 9,999.9kWh
- Maximum Cumulative Log Time: 75 hours
- Data download: Stored data can be transferred to PC using MS-6174 data adaptor (sold separately)

DIGITAL DC POWER METER WITH INTERNAL SHUNT

- Continuous Current Range: 0-20A
- Peak Current: 30A for 30 minutes

DIGITAL DC POWER METER TO SUIT 50mV EXTERNAL SHUNT

- Current Range: 0-200A depending on shunt
- Suitable DC shunts: QP-5412 50A 50mV, QP-5415 100A 50mV, QP-5417 200A 50mV

USB DATA ADAPTOR FOR DC POWER METERS

Enhance the data collection of the MS-6170 or MS-6172 DC power meter by connecting to your PC with this USB data adaptor. The included software allows you to access live data and download stored data from the power meter memory. Data is graphed to show power usage over time and can then be exported for further analysis and logging over long periods. Pack includes data interface module, data cable, USB cable, and PC software.

- Data module dimensions: 45(L) x 35(W) x 18(H)mm

↑	Current Range	Cat.	Qty 1+	Qty 4+	Qty 10+
	0 - 20A	MS-6170	\$79.95	\$71.95	\$63.95
	0 - 200A	MS-6172	\$89.95	\$80.95	\$71.95
	USB Data Adaptor	MS-6174	\$99.95	\$89.95	\$79.95

DUAL BATTERY VOLT/CURRENT MONITOR

This unit enables you to monitor your start battery voltage and total battery activity of your auxiliary battery. We all know it is essential to monitor your main (engine starter) battery and use an isolator to prevent it from being over discharged, but it is also extremely important to know what exactly is happening with your "house power" system. This is valid for boats, 4WDs, caravans/RVs etc., especially when running inverters and refrigeration. This fantastic dual battery monitor serves that purpose by giving you the voltage of your start battery and house battery, as well as the current (amps) flow on your house battery - both charging and discharging. To top it off, the unit warns you via a buzzer if house battery falls below 11.5V (or over 15.5V). The display unit easily fits timber bulkheads up to 27mm thick, or sheet metal dashboards, and a 250A current shunt (75mV) is supplied which should suffice for all but the biggest installations.

- This product may save you a fortune from replacing damaged batteries.

Specifications	MS-6176
Front panel dimensions	72(W) x 65(H)mm
Mounting hold	2" or 52mm
Shunt dimensions	135(L) x 30(W) x 25(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6176	\$179.00	\$160.95	\$142.95



BATTERY BOXES, TRAYS & CLAMPS

BATTERY BOXES

Protect your batteries with these sturdy boxes. Perfect for mounting in your boat, trailer or caravan. Includes mounting clamps and lid strap to secure the box properly in place.



Note: Battery not included

Two models available:

- HB-8100 - Battery box to suit 40Ah SLA batteries
- Dimensions: External: 365 (L) x 270 (W) x 265 (H)mm
Internal: 260 (L) x 180 (W) x 200 (H)mm

- HB-8102 - Battery box to suit 100Ah SLA batteries
- Dimensions: External: 460 (L) x 265 (H) x 260 (W)mm
Internal: 350 (L) x 200 (H) x 180 (W)mm

↑	External Dimensions	Cat.	Qty 1+	Qty 4+	Qty 10+
	365 x 270 x 265mm	HB-8100	\$24.95	\$22.35	\$19.70
	460 x 265 x 260mm	HB-8102	\$29.95	\$26.90	\$23.70

BATTERY BOX WITH POWER ACCESSORIES

No longer do you have to take a bird's nest of wiring and connections for your deep cycle battery when you go camping; this extremely handy battery box has all the common connections you would typically need, along with a convenient carry handle. Just fit your 100Ah deep cycle battery into the box, connect up the positive and negative wires, and you are ready to go. Features an LED voltmeter to help monitor battery level, two high current marine grade cigarette power sockets, and high current bolt terminals to connect your higher current loads such as an inverter. Over current protection included for the cigarette sockets.

- Dimensions:
Internal: 355 x 220 x 290mm



↑	External Dimensions	Cat.	Qty 1+	Qty 4+	Qty 10+
	420 x 240 x 310mm	HB-8500	\$99.95	\$89.95	\$79.95

HEAVY DUTY STEEL BATTERY TRAYS

These battery trays are pressed out of 1.2mm mild steel & vinyl coated to protect from acids, oils etc.

They feature cruciform slots in the base to facilitate existing mounting holes in a truck or car chassis, as well as slots to allow battery hold-down rods.

2 sizes available:

BATTERY SECURING TRAY - SMALL

Dimensions: 280(L) x 200(W) x 45(H)mm
HB-8104

BATTERY SECURING TRAY - LARGE

Dimensions: 340(L) x 200(W) x 45(H)mm
HB-8106

HB-8104

Note: Not recommended for marine salt water use.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Small	HB-8104	\$12.95	\$11.35	\$10.35
Large	HB-8106	\$13.95	\$12.35	\$10.95



ADJUSTABLE UNIVERSAL BATTERY HOLD DOWN CLAMP

Universal battery clamp which adjusts to suit batteries ranging from 135-190mm width and 150-230mm height.

- Metal construction with wing nut adjustments



SEE PAGES 292 & 308 FOR BATTERY TERMINALS

Note: Battery not included

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HC-4039	\$9.95	\$8.75	\$7.75

BATTERY TERMINALS & CONDITIONERS

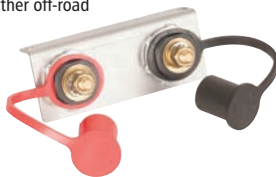
BATTERY TERMINALS

REMOTE BATTERY TERMINALS - 250A

This remote battery jumper terminal provides convenient access to the vehicle battery for charging or jump starting.

NEW
2015

- Suitable for cars, boats, trucks, caravans and other off-road equipment
- Aluminium panel provides easy mounting
- Includes one positive and one negative post
- Posts allow remote access to concealed battery for jump starting or charging
- Protective red & black rubber covers
- Solid brass studs
- 250A Maximum current rating
- Terminal depth: 65mm
- Mounting plate dimensions: 130(L) x 50(W) x 20(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
250A	HM-3075	\$49.95	\$44.90	\$39.90

500A RED/BLACK SNAP ON BATTERY TERMINALS

Red/Black quick connect/disconnect battery terminals for automotive, marine, or industrial use. Used for protecting the exposed positive/negative battery connections from dust, grime or other build up.

- Rated at 500A
- Dimensions: 66(L) x 42(W) x 25(H)mm



Note: Battery not included

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
Set of 2	HM-3087	\$14.95	\$13.35	\$11.70

MULTI-CONNECT BATTERY TERMINAL - RED

This Multi-Connection Battery Terminal can be used to terminate up to 4 electronic devices. It can also be used separately as a bus-bar that connects to multiple devices. Perfect for simplifying the wiring in the car, surveillance or security system and other 12V applications where multiple accessory wiring is needed.

NEW
2015

- Terminates up to 4 electronic devices
- Red colour for positive connections
- Does not need screws
- Spade terminals included
- Dimensions: 75(L) x 40(W) x 20(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
12V	HM-3089	\$9.95	\$8.75	\$7.75

UNIVERSAL BRASS BATTERY TERMINALS



HC-4034

HC-4030

HC-4038

These heavy duty, solderless range of Marine grade brass battery terminals have got you connected. With five options available from universal saddle, lug bolt style, side barrel, end entry and not forgetting the built in isolating switch perfect for isolating your battery to prevent battery drain when not in use.

Sold in Pairs, POS - NEG, HC-4038 isolation type sold singular (Negative post only)

↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	Saddle	Pair HC-4030	\$9.95	\$8.75	\$7.75
	Lug Bolt Style	Pair HC-4034	\$9.95	\$8.75	\$7.75
	Isolating (Negative Post)	Each HC-4038	\$9.95	\$8.75	\$7.75

FUSED BATTERY TERMINALS

BATTERY TERMINAL FUSES

These terminal fuses provide easy and economical circuit protection. They are ideal to use as circuit protection for your DC electrical system or battery banks. They are available in 3 current ratings from 50, 100, and 200amps. They feature a clear transparent housing to provide visual indication of blown condition.

NEW
2015

1
YEAR WARRANTY

Specifications	
Rating	58VDC
Material	Ceramic body
Mounting hole	8.3mm
Dimensions	24(H) x 20(W) x 11(D)mm



SF-4182

SF-4184

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
50A	SF-4180	\$5.95	\$5.50	\$4.75
100A	SF-4182	\$5.95	\$5.50	\$4.75
200A	SF-4184	\$5.95	\$5.50	\$4.75

BATTERY CONDITIONERS

BATTERY DISCHARGE PROTECTOR

Protects your car battery from total discharge by switching off appliances such as fridges and TV sets before the battery voltage drops to an unrecoverable level. When battery voltage is re-established by recharging, it switches appliances on automatically. The interrupting voltage is adjustable from 10.4 to 13.3 VDC. Essential low-cost insurance if you have a dual battery setup in a boat, 4WD, RV or for an alternative energy system such as solar or wind power.



Specifications	AA-0262
Operating voltage	12VDC
Max. switching current	20A
Interrupting voltage	10.4 - 13.3VDC
Resetting voltage	approx. 0.8V (+/-0.3V) above interrupt voltage
Current consumption	< 0.7mA when OFF, < 1.6mA when ON
Dimensions	87(L) x 60(W) x 32(H)mm

1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	AA-0262	\$43.95	\$38.45	\$34.95

LEAD-ACID BATTERY CONDITIONER

Removes or reduces sulphation which kills batteries. When wet-cell lead-acid batteries are allowed to sit around they will sulphate up in as short a time as 6 months. The sulphate builds up on the plates and separators. This product basically dissolves the sulphation. The product is so good that the manufacturer will extend the warranty on a new battery by a year if used when the battery is new.

- One bottle will do up to an N70Z size batteries (4WD, boat, truck etc).



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1420	\$9.95	\$8.75	\$7.75

TECH TALK

BATTERY MAINTENANCE

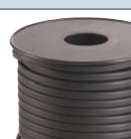
Periodic visual inspection of the battery is recommended.

If the battery is stored for over six months, it is recommended to charge and discharge the battery several times to recover the battery capacity, failure to do so may result in a loss of capacity and shorter battery life.

Bear in mind that self-discharge has to be taken into consideration when storing a charged battery. The remaining battery capacity should be at least 50% after a month of storage at room temperature for a fully charged battery. High storage temperatures will accelerate the self-discharge, and reduce the remaining capacity.

LET'S FIND EVERYTHING YOU NEED!

FROM
\$1.20 per metre
WH-3057



2 CORE DC POWER CABLE P213

FROM
\$8.95
TH-1828



CRIMPING TOOLS P133

FROM
\$12.95
NA-1200



HAND PROTECTION LOTION P135

FROM
\$79.95
QP-2261



BATTERY TESTER P302

SEALED LEAD ACID BATTERIES

Sealed lead acid batteries are used generally for two purposes. Standby applications such as an emergency power source for safety lights and for security and burglar alarm systems, computer peripheral terminals etc. and cyclic applications as a portable power source for MP3 players, DVRs, toys, lights and use with solar panels for remote power.

TECH TALK

The features of these batteries include:

- Laak proof construction
- usable and rechargeable in any position
- wide operating temperature range
- designed not to discharge hydrogen into the atmosphere.
- long service life
- high discharge rate capability
- deep discharge recovery

Charge voltage for 12 volt is 13.5 to 14.7 volts and for 6 volt is 6.8 to 7.4V volts. The charging time must be doubled if the charge current is halved.

Cat.	Capacity	20hr rate	10hr rate	5hr rate	1hr rate	Initial Charge Current	Cycle Voltage	Standby Voltage	Page
SB-2495	6V 1.3Ah	65mA (1.3Ah)	117mA (1.17Ah)	208mA (1.04Ah)	780mA (0.78Ah)	<0.39A	7.20-7.50V	6.75-6.90V	309
SB-2496	6V 4Ah	210mA (4.2Ah)	378mA (3.7Ah)	672mA (3.36Ah)	2.25A (2.25Ah)	<1.2A	7.20-7.50V	6.75-6.90V	309
SB-2498	6V 5Ah	250mA (5.0Ah)	450mA (4.5Ah)	800mA (4Ah)	3.0A (3.0Ah)	<1.5A1	7.20-7.50V	6.75-6.90V	309
SB-2497	6V 12Ah	600mA (12Ah)	1.08A (10.8Ah)	1.92A (9.6Ah)	7.2A (7.2Ah)	<3.6A	7.20-7.50V	6.75-6.90V	309
SB-2480	12V 1.3Ah	65mA (1.30Ah)	117mA (1.17Ah)	208mA (1.04Ah)	780mA (0.78Ah)	<0.39A	14.4-15.0V	13.5-13.8V	309, 457
SB-2482	12V 2.2Ah	110mA (2.2Ah)	198mA (1.98Ah)	352mA (1.76Ah)	1.32A (1.32Ah)	<0.66A	14.4-15.0V	13.5-13.8V	309
SB-2484	12V 4.2Ah	200mA (4.2Ah)	380mA (3.8Ah)	680mA (3.4Ah)	2.40A (2.4Ah)	<1.2A	14.4-15.0V	13.5-13.8V	309
SB-2485	12V 6Ah	300mA (6Ah)	486mA (4.86Ah)	864mA (4.32Ah)	3.24A (3.24Ah)	<1.62A	14.4-15.0V	13.5 - 13.9V	309
SB-2486	12V 7.2Ah	360mA (7.2Ah)	650mA (6.5Ah)	1.15A (5.75Ah)	4.32A (4.32Ah)	<2.1A	14.4-15.0V	13.5-13.8V	309
SB-2487	12V 9Ah	450mA (9Ah)	810mA (8.1Ah)	1.44A (7.2Ah)	5.4A (5.4Ah)	<2.7A	14.4-15.0V	13.5 - 13.9V	309
SB-2489	12V 12Ah	600mA (12Ah)	1.08A (10.8Ah)	1.92A (9.6Ah)	7.2A (7.2Ah)	<3.6A	14.4-15.0V	13.5 - 13.9V	309
SB-2490	12V 18Ah	900mA (18Ah)	1.72A (17.2Ah)	3.05A (15.2Ah)	10.8A (10.8Ah)	<3.4A	14.4-15.0V	13.5 - 13.9V	309
SB-1698	12V 26Ah	1.3A (26Ah)	2.11A (21.1Ah)	3.74A (18.7Ah)	14A (14Ah)	<7.8A	14.4-15.0V	13.5 - 13.9V	310
SB-1699	12V 38Ah	1.94A (38.8Ah)	3.8A (38Ah)	6.16A (30.8Ah)	22.3A (22.3Ah)	<12A	14.4-15.0V	13.5 - 13.9V	310
SB-1695	12V 100Ah	5.1A (102Ah)	10A (100Ah)	16.2A (81Ah)	58.5A (58.5Ah)	<30A	14.4-15V	13.5 - 13.8V	310

Note 1: Current is limited by spring terminal type

6 VOLT SLA BATTERIES

1.3 AMP HOUR - 6 VOLT

- Size: 97 (L) x 51 (D) x 21(H)mm
- Spare SLA battery
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2495	\$12.95	\$11.35	\$10.35

4 AMP HOUR - 6 VOLT

- See table for specifications
- Size: 70(L) x 47(D) x 106(H)mm

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2496	\$14.95	\$13.35	\$11.70

5.0 AMP HOUR 6 VOLT LANTERN BATTERY

- This 6 volt 5Ahr rechargeable sealed lead acid battery suits those popular Dolphin style torches.
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2498	\$24.95	\$22.35	\$19.70

12 AMP HOUR 6 VOLT

- Size: 151(L) x 51(D) x 100(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2497	\$29.95	\$26.90	\$23.70

12 VOLT SLA BATTERIES

1.3 AMP HOUR 12 VOLT

- Size: 97(L) x 43(D) x 57(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2480	\$19.95	\$17.70	\$15.70

2.2 AMP HOUR 12 VOLT

- Size: 178(L) x 34(D) x 66(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2482	\$22.95	\$20.35	\$18.35

4.2 AMP HOUR 12 VOLT

- Size: 90(L) x 70(D) x 106(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2484	\$27.95	\$24.95	\$22.35

6.0 AMP HOUR 12 VOLT

- Size: 150(L) x 65(W) x 93(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2485	\$24.95	\$22.35	\$19.70

7.2 AMP HOUR 12 VOLT

- Size: 151(L) x 65(D) x 93(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2486	\$29.95	\$26.90	\$23.70

9.0 AMP HOUR 12 VOLT

- Size: 150(L) x 65(W) x 93(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2487	\$39.95	\$35.90	\$31.90

12.0 AMP HOUR 12 VOLT

- Size: 150(L) x 100(W) x 93(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2489	\$54.95	\$49.45	\$43.90

18 AMP HOUR 12 VOLT

- Size: 181(L) x 77(D) x 167(H)mm
- See table for specifications

Cat.	Qty 1+	Qty 4+	Qty 10+
SB-2490	\$74.95	\$67.50	\$59.95

SLA BATTERY CARRY BAG

Designed for carrying a large sealed lead-acid battery. Suits sealed lead-acid batteries 12V 7.2Ah (SB-2486) or 6V 12Ah (SB-2497) - (and Panasonic equivalents) approx. max. size 151 x 65 x 101mm. Features fused cigarette-lighter socket (10A), zip-up cover, and internal fold-away protective flap.

- Battery can be medium/slow charged INSIDE THE BAG!

Cat.	Qty 1+	Qty 4+	Qty 10+
HB-6360	\$19.95	\$17.70	\$15.70

SEE PAGE 307 FOR HOLD DOWN HARDWARE

HIGH CAPACITY LEAD ACID BATTERIES

DEEP-CYCLE GEL CELL BATTERIES

DEEP CYCLE BATTERIES

These genuine deep-cycle batteries add to our already substantial range of batteries. As with all gel cells, they can be operated and charged in any position, are leakproof and completely sealed. Gel batteries are ideal for solar power, camping, 4WD, auxiliary applications and anywhere deep discharge and recovery is required. Three sizes available:



Check with our call centre for freight rates if you are a long way from our warehouse. (SYDNEY)

↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	12V 26Ah	SB-1698	\$135.00	\$115.95	\$102.95
	12V 38Ah	SB-1699	\$219.00	\$196.95	\$174.95
	12V 100Ah	SB-1695	\$429.00	\$385.00	\$345.00

Specifications	SB-1698	SB-1699	SB-1695
Terminal voltage	12V	12V	12V
Nominal capacity	20 hour rate 26Ah	20 hour rate 38.8Ah	20 hour rate 100Ah
Capacity at 0°C	85%	86%	86%
Self discharge	9% after 3 months (residual capacity 91%)	9% after 3 months (residual capacity 91%)	9% after 3 months (residual capacity 91%)
Dimensions W x D x Hmm	165 x 172 x 110	197 x 165 x 170	330 x 173 x 223
Weight	8.35kg	13kg	31.5kg
Special Order	NO	NO	YES

POWERSTACK BATTERY BANKS

12V 150AH SLEEK AGM DEEP CYCLE BATTERY

This high performance deep cycle AGM battery offers an excellent power storage solution to those with minimal space. A high energy density and top grade materials allow such a high capacity of 150Ah to be packed into such a small footprint - just 123 x 556mm, suitable to fit into a standard 23" rack. Front terminal access makes battery connections neat and simple, and the durable carry handles allow for easier handling and inspection. Designed to perform in harsh tropical conditions, and with a superior high rate discharge performance and higher cycle service life, this battery is perfect for a wide array of applications including remote solar systems, caravan and RV, motor home, and marine. With a float voltage of 13.5V, this AGM battery is perfectly suited to caravans to make the most of charging off the engine alternator. See our website for a full specification datasheet.

- Small footprint to suit installations in tight areas such as marine, caravans or motor homes
- Design Float life of 12+ years in accordance with Eurobat classification of long life battery
- Suitable for standard 23" rack
- Advanced AGM (absorbed glass matt) separator offering longer service life and superior high rate discharge performance
- Threaded post copper insert terminals offering high conductivity
- Fire retardant container and cover (UL40 - V0)
- Compliant to IEC 60896-21/22:2004 and UL approved

NOTE: NOT STOCKED AT STORES BUT CAN BE ORDERED.



↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	12VDC 150Ah	SB-1822	\$769.00	\$689.00	\$615.00

Specifications	SB-1822
Voltage	12V
Float voltage	13.5V
Boost voltage	13.8V
Capacity	150Ah (10hr rate), 165Ah (20hr rate)
Self-discharge	< 1% per week
Shelf life without re-charge	Up to 6 months
Operating temperature	-40°C to 60°C
Designs float life	12+ years at 27°C
Design cycle life	1800+ cycles @20%DOD 900+ cycles @50%DOD 500+ cycles @80%DOD
Dimensions / Weight	123(W) x 556(D) x 296(H)mm / 52Kg



BATTERY BANKS

POWERSTACK HIGH PERFORMANCE VRLA BATTERY BANKS WITH RACKING

Making a substantial investment in a large renewable energy or remote power system means you should have the best battery technology available. Able to withstand deep discharge to 0% capacity for 1000 cycles, the Powerstack battery banks are the last word in genuine deep-cycle technology ensuring long service life. The modular, stackable rack design enables easy installation and offers complete flexibility for future system expansion. This racking is something that you just don't get with other deep cycle batteries, and makes such a difference to ease of use and flexibility of installation. This significantly reduces your installation costs as you don't have to go out and make your own rack for your battery bank - that's all done for you with the Powerstack.

Each Powerstack comes fully loaded with six 2V deep cycle valve regulated lead acid (VRLA) cells, and includes interconnecting busbars to connect up each cell to make the 12V bank. The construction of each cell is flame retardant copolymer casing with lead coated copper conductor terminals, the racking is steel painted in acid resistant paint, and all parts can be recycled. Suitable for mining, defence, UPS backup, transmission, telephony as well as high end alternative energy systems and remote area power systems.

Due to the size and weight of these very specialised units they will only be available for dispatch direct from our central warehouse in Sydney and Auckland. Freight will be additional - contact us for a quotation.

See our website for full specifications and downloadable datasheets.

- Modular stackable design
- Cycle life: 4000 cycles at 20% discharge, 1000 cycles at 100% discharge
- Self discharge: Less than 1% per week
- Design life: 20 years

NOTE: NOT STOCKED AT STORES BUT CAN BE ORDERED.



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	12V 600Ah	SB-1800	\$2999.00	\$2699.00	\$2399.00
	12V 1350Ah	SB-1802	\$6299.00	\$5669.00	\$5039.00

Specifications	SB-1800	SB-1802
Type	Valve Regulated Lead Acid deep-cycle battery	Valve Regulated Lead Acid deep-cycle battery
Rating	12V 600Ah	12V 1350Ah
Ah efficiency	>90%	>90%
Charging voltage	2.23 - 2.3V per cell	2.23 - 2.3V per cell
Charging current	60 - 120A	135 - 270A
Bank dimensions	706(W) x 477(H) x 550(D)mm	706(W) x 802(H) x 550(D)mm
Bank weight	260kg	530kg



PETROL GENERATORS

SINE WAVE INVERTER GENERATORS

These units are petrol powered and differ from cheaper units, in that the engine (which is built to the same design as the market leading Japanese brands) drives a DC alternator. A pure sine wave inverter then converts the DC to a stable pure sine wave 230VAC, suitable for appliances including sensitive electronics.

No matter what the load is on the generator or the speed of the engine, the output remains very well regulated. The added benefit is that the petrol motor is far better matched to the load, reducing overall size, keeping engine speed in line with the load, reducing noise and increasing fuel efficiency. Additional features include electric key start, electric remote start (MG-4502 only), low oil cut-out, and overload circuit breaker, fuel indicator, oil alert system, circuit breaker without fuse & a circuit protector.

TWO models available:

	1kW MG-4501	2kW MG-4502
Type	Forced air-cooled, 1 cylinder, 4-stroke, OHV Engine	
Displacement	53cc	125cc
Rated power output	1.2KW / 5000RPM	2.6KW/5000RPM
Max. power output	1.4KW / 5500RPM	3.0KW/5500RPM
Bore x Stroke(mm)	43.5 x 35.8mm	52.4 x 57.8mm
Ignition system	T.D.I.	T.D.I.
Starting system	Recoil start	Recoil start/Electric
Fuel tank capacity	2.7L	7.0L
Fuel consumption	420g / kWh	400g / kWh
Continuous operating time	6 hours	6.5 hours
Noise (7m away)		
(No Load/Full Load)	58dBA/61dBA	58dBA/67dBA
Rated output frequency	50Hz	50Hz
Rated output voltage	230VAC	230V
D. C. Output	12V 5A	12V 8.3A
Output sockets	1 x 15A (AUS type)	2 x 15A (AUS type)
Rated power output(kW)	0.85	2
Max. power output(kW)	1.0	2.2
Dimensions	440(L) x 235(W) x 380(H)mm	545(L) x 290(W) x 500(H)mm
Net weight	13kg	31kg

*Note: 2kW, spare parts and covers not stocked in all stores. Please call ahead to check stock and order in.



MG-4501



MG-4502



MG-4516

Generators	Cat.	Qty 1+	Qty 2+	Qty 4+
1kW Sine Wave Generator	MG-4501	\$699.00	\$665.00	\$629.00
2kW Sine Wave Generator	MG-4502*	\$929.00	\$885.00	\$835.00

COVERS FOR POWERTECH SINE WAVE INVERTER GENERATORS

Protect your valuable inverter generator from dust and moisture during transport or storage with these handy spray covers. Manufactured from woven nylon fabric.

NOTE: Cover must be removed when generator is operational. Covering generator while it is operational can cause a fire or result in damage to the generator.

Generator Covers	Cat.	Qty 1+	Qty 2+	Qty 4+
Cover to suit MG-4501	MG-4516*	\$24.95	\$23.70	\$22.35
Cover to suit MG-4502	MG-4517*	\$34.95	\$32.95	\$31.45

SPARE PARTS FOR POWERTECH SINE WAVE INVERTER GENERATORS

Spare Parts	Cat.	Qty 1+	Qty 2+	Qty 4+
Oil Dipstick to suit MG-4501	MG-4610*	\$9.95	\$9.25	\$8.75
Air Filter Assy to suit MG-4501	MG-4611*	\$14.95	\$13.95	\$13.35
Carby Assy to suit MG-4501	MG-4612*	\$44.95	\$42.90	\$40.45
Oil Dipstick to suit MG-4502	MG-4613*	\$9.95	\$9.25	\$8.75
Carby Assy to suit MG-4502	MG-4614*	\$109.00	\$94.95	\$89.95
Air Filter Assy to suit MG-4502	MG-4615*	\$59.95	\$56.50	\$53.95
Start Battery to suit MG-4502	MG-4616*	\$49.95	\$46.90	\$44.90

WARNING!!

These products are supplied without any oil in the sump. Oil MUST be filled prior to use. Refer user manual.

TECH TALK!

PETROL/DIESEL GENERATORS - MAINTENANCE

Most petrol and diesel generators are made in China. That's not necessarily bad but it is a long way away. If you buy one of these, double (triple) check that, in the case of a four stroke motor it has sufficient oil in the sump.

A lot of them are shipped without oil in the sump so be careful! General purpose car engine oil is fine to put in the sump. The only other thing that you need to check are spark plugs and fuel filters. Probably not a bad idea to have a spare of each if you are making a long trip.

Finally, we strongly believe that you should only buy a 4 stroke generator for all the obvious reasons.

LET'S FIND EVERYTHING YOU NEED!

FROM
\$24.95
PS-4182



15A EXTENSION LEADS P339

FROM
\$19.95
HB-6175



WEATHERPROOF BOXES P337

FROM
\$399.00
ZM-9130



FOLD-UP SOLAR PANELS P284

FROM
\$79.95
MS-4044



PORTABLE RCD (15A TO 10A) P339

INVERTERS - QUICK REFERENCE GUIDE

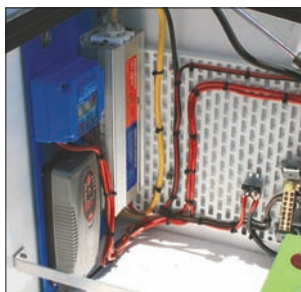
Wattage	Input	Waveshape	Surge	Input Connection	Page	Cat.
150W	12V	Modified Sine	450W	Lighter Plug	312	MI-5127
150W	12V	Modified Sine	450W	Lighter Plug	313	MI-5102
180W	12V	Pure Sine	360W	Lighter Plug	315	MI-5700
300W	12V	Modified Sine	1000W	Screw Terminals	313	MI-5104
360W	12V	Pure Sine	720W	Heavy Duty Screw-down Terminals	315	MI-5702
360W	24V	Pure Sine	720W	Heavy Duty Screw-down Terminals	315	MI-5703
400W	12V	Modified Sine	1200W	Screw Terminals	313	MI-5106
400W	24V	Modified Sine	1200W	Screw Terminals	313	MI-5107
600W	12V	Modified Sine	1500W	Bolt Terminals	313	MI-5108
600W	12V	NEW Pure Sine + 20A Solar Regulator	1200W	Heavy Duty Screw-down Terminals	317	MI-5720
800W	12V	Pure Sine	1600W	Heavy Duty Screw-down Terminals	315	MI-5704
800W	12V	Modified Sine	2000W	Bolt Terminals	314	MI-5110
1000W	12V	Modified Sine	2500W	Bolt Terminals	314	MI-5112
1000W	12V	NEW Pure Sine + 30A Solar Regulator	2000W	Heavy Duty Screw-down Terminals	317	MI-5722
1100W	12V	Pure Sine	2200W	Heavy Duty Screw-down Terminals	316	MI-5706
1500W	12V	Modified Sine	3500W	Bolt Terminals	314	MI-5114
1500W	12V	NEW Pure Sine + 30A Solar Regulator	3000W	Heavy Duty Screw-down Terminals	317	MI-5724
1500W	12V	Pure Sine	3000W	Heavy Duty Screw-down Terminals	316	MI-5708
2000W	12V	Pure Sine	4000W	Heavy Duty Screw-down Terminals	316	MI-5710
2000W	24V	Modified Sine	4500W	Bolt Terminals	314	MI-5116
2000W	24V	Pure Sine	4000W	Heavy Duty Screw-down Terminals	316	MI-5712

WHEN TO AND WHEN NOT TO USE INVERTERS

We DO NOT recommend that you use these products to operate the following:

- FRIDGES
- AIR COMPRESSORS
- AIR CONDITIONERS

An inverter is a device which converts 12 or 24VDC into 240VAC. The 240VAC generated is as lethal as the power in homes, and should be treated with the same respect. Inverters can be easily damaged, and connecting the input voltage terminals the wrong way around on the battery can damage the unit - be careful!!



Appliances most suitable for connection include:

- most power tools
- most TVs
- most computers
- most audio equipment
- lights
- video recorders / players
- fax machines

Fluorescent lights can give a highly inductive load on start up which can damage inverters. Appliances not suitable include:

- electric blankets
- hair dryers
- radiators
- toasters
- irons
- heavy power tools (large angle grinders, circular saws etc)

Inverters will generally drive inductive loads such as electric motors, but only if the startup current is not high. Generally high startup current situations are when the motor is permanently coupled to a load such as a refrigeration or airconditioner compressor (Imagine the compressor at rest just before top dead centre you can easily realise the start up load on the motor!). Many other motors such as in drills, small angle grinders, buffers etc start up under virtually no load and this is usually OK for the inverter provided the tool is within the inverter rating. It needs to be pointed out that one of the major differences between a domestic power point and inverter is that the source impedance of a power point is very low compared to the inverter. This is why inverters have trouble with appliances with high start up currents and a domestic power point does not. Another thing that must be remembered is the special case of fluorescent lights with ballast chokes in them (by far the most common type).

Manufacturers of fluoro lights assume that they are just going to be installed to a normal 240V 50Hz sine wave supply. They are required to supply a product that does not overly distort the mains waveform. They generally comply with this by installing a, say, 3.3 μ F non polarised capacitor across the mains/neutral supply inside the housing of the lamp fitting. This is called a power factor correction capacitor. This seems to work OK for a sine wave supply from a low source impedance. When you drive such a device with modified sine wave 240V power, different things start to happen. The power factor correction capacitor presents a much greater load to a modified sine wave signal (which is a complex collection of high and low frequencies) than it would if it was a sine wave. The bottom line is to reduce this capacitor to about 0.47 μ F or take it out completely. Inverters are generally OK then. It is also possible for an inverter to be damaged by the surges in current generated when using standard fluorescent starters. This can be prevented by replacing the starter with an electronic starter.

INVERTERS - MODIFIED SINE WAVE RANGE

Getting 230VAC to run small electrical appliances from your cars battery is easy with our range of general purpose inverters. We have models suitable for charging your laptop in the bush to running a microwave in a motor home. They have fan assisted cooling and electrical isolation for safety.

150W CAN-SIZED POWER INVERTER WITH 2.1A USB OUTPUT

Fits in the car's cup holder, plugs into the cigarette lighter socket and outputs 230VAC to power a variety of 230VAC equipment from a battery charger to a laptop power supply. Also features a USB port with 2.1A output, allowing you to quickly charge many modern electronics gadgets, including power-hungry Tablets. It also features electrical isolation to prevent sudden mains voltage at your cigarette lighter socket.

- Powered by cigarette lighter socket adaptor
- Modified sine wave
- USB Output: 5VDC 2.1A
- Dimensions: 165(L) x 60(Dia.)mm

POWERTECH



	Cat.	Qty 1+	Qty 3+	Qty 6+
150W 12VDC	MI-5127	\$49.95	\$44.90	\$39.90

TECH TALK!

ELECTRICALLY ISOLATED INVERTERS

Our inverter lineup includes models that have dielectric insulation between the 12V(24V) primary and the high voltage (AC) secondary. This means that there is no path for the 240V to appear at the battery bank terminals. The reason for this, of course is safety. Many people these days connect inverters permanently into multiple earth neutral (M.E.N.) 240V house wiring in order to have the convenience of backup power. This is quite common also in buses, RVs and boats which have their mains usually wired to M.E.N. standards. The problem with this is that a situation can occur where in an autotransformer wound inverter, mains can appear on one side of the battery.

You could be working on the batteries in the bilge of a boat, for example, connected to shore power and under a very possible set of circumstances, get electrocuted. If there is no electrical path between the mains 240V and the battery bank you are intrinsically safe. And yes, the great percentage of people use inverters that are not connected to the mains grid and therefore the secondary is floating and fairly safe. As we cannot guarantee the end use of our inverters, we decided to take this step. Note: We recommend that you take the prudent step of earthing the negative battery terminal anyway when installing our new inverters in permanent M.E.N. installations.

INVERTERS - MODIFIED SINE WAVE RANGE - STANDARD RANGE

150 WATT (450 WATT SURGE) 12VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5102
Output power continuous	150W
Output power surge	450W
Standby current	< 300mA
Input voltage	12VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	N/A
Input connection	Cigarette lighter plug
Weight	0.85kg
Dimensions (L x W x H)	165 x 91 x 58mm

Circuit Protection	
Thermal shutdown/alarm	60°C
Low battery alarm	10.5V +/- 0.5V
Low battery shutdown	10.0V +/- 0.5V
Battery high shutdown	15.5V +/- 0.5V
External fusing	20A max

Suits laptop computers, recharging power tools or batteries, lamps and fluorescents up to 150W, fax machines etc.



POWERTECH

	Cat.	Qty 1+	Qty 3+	Qty 6+
150W 12VDC	MI-5102	\$54.95	\$49.45	\$43.90

300 WATT (1000 WATT SURGE) 12VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5104
Output power continuous	300W
Output power surge	1000W
Standby current	< 300mA
Input voltage	12VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Cigarette lighter or alligator clamps
Weight	1.1kg
Dimensions (L x W x H)	190 x 91 x 58mm

Circuit Protection	
Thermal shutdown/alarm	60°C
Low battery alarm	10.5V +/- 0.5V
Low battery shutdown	10.0V +/- 0.5V
Battery high shutdown	15.5V +/- 0.5V
External fusing	35A max

POWERTECH



Leads supplied with unit.

	Cat.	Qty 1+	Qty 3+	Qty 6+
300W 12VDC	MI-5104	\$69.95	\$62.95	\$55.95

400 WATT (1200 WATT SURGE) 12VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5106
Output power continuous	400W
Output power surge	1200W
Standby current	< 300mA
Input voltage	12VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Screw terminals and alligator clamps
Weight	1.2kg
Dimensions (L x W x H)	190 x 91 x 52mm

Circuit Protection	
Thermal shutdown/alarm	60°C
Low battery alarm	10.5V +/- 0.5V
Low battery shutdown	10.0V +/- 0.5V
Battery high shutdown	15.5V +/- 0.5V
External fusing	50A max

POWERTECH



Leads supplied with unit.

	Cat.	Qty 1+	Qty 3+	Qty 6+
400W 12VDC	MI-5106	\$89.00	\$79.95	\$70.95

400 WATT (1200 WATT SURGE) 24VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5107
Output power continuous	400W
Output power surge	1200W
Standby current	<300mA
Input voltage	24VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB Output	-
Input connection	Screw terminals and alligator clamps
Weight	1.2kg
Dimensions (L x W x H)	190 x 91 x 52mm

Circuit Protection	
Thermal shutdown/alarm	60°C
Low battery alarm	21VDC +/- 1V
Low battery shutdown	20VDC +/- 1V
Battery high shutdown	30VDC +/- 1V
External fusing	25A max

POWERTECH



Lead supplied with unit.

	Cat.	Qty 1+	Qty 3+	Qty 6+
400W 24VDC	MI-5107	\$89.00	\$79.95	\$70.95

600 WATT (1500 WATT SURGE) 12VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5108
Output power continuous	600W
Output power surge	1500W
Standby current	< 300mA
Input voltage	12VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	1m lead with eye terminal
Weight	1.7kg
Dimensions (L x W x H)	242 x 91 x 58mm

Circuit Protection	
Thermal shutdown/alarm	60°C
Low battery alarm	10.5V +/- 0.5V
Low battery shutdown	10.0V +/- 0.5V
Battery high shutdown	15.5V +/- 0.5V
External fusing	80A max

Lead supplied with unit.



	Cat.	Qty 1+	Qty 3+	Qty 6+
600W 12VDC	MI-5108	\$129.00	\$115.95	\$102.95

INVERTERS

INVERTERS - MODIFIED SINE WAVE RANGE - STANDARD RANGE (CONTINUED)

800 WATT (2000 WATT SURGE) 12VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5110
Output power continuous	800W
Output power surge	2000W
Standby current	< 800mA
Input voltage	12VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Bolt eye terminals
Weight	<4.0kg
Dimensions (L x W x H)	310 x 205 x 75mm

Suits lamps and fluorescents up to 800W, 68cm televisions and VCRs, power drills, blenders, belt sanders etc.

Circuit Protection	
Thermal shutdown/alarm	60°C (Automatic Recovery)
Low battery alarm	10.5V +/- 0.5V
Low battery shutdown	15.5V +/- 0.5V
Battery high shutdown	15.5V +/- 0.5V
External fusing	105A max



Rear View



Lead supplied with unit.

NEW LOW PRICE

1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
800W 12VDC	MI-5110	\$169.00	\$151.95	\$134.95

1000 WATT (2500 WATT SURGE) 12VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5112
Output power continuous	1000W
Output power surge	2500W
Standby current	< 800mA
Input voltage	12VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Bolt eye terminals
Weight	5.0kg
Dimensions (L x W x H)	310 x 205 x 75mm

Suits lamps and fluorescents up to 1000W, 68cm televisions and VCRs, power drills, blenders, microwave ovens, belt sanders etc.

Circuit Protection	
Thermal shutdown/alarm	60°C
Low battery alarm	10.5V +/- 0.5V
Low battery shutdown	10.0V +/- 0.5V
Battery high shutdown	15.5V +/- 0.5V
External fusing	140A max



Rear View



Lead supplied with unit.

NEW LOW PRICE

1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
1000W 12VDC	MI-5112	\$219.00	\$196.95	\$174.95

1500 WATT (3500 WATT SURGE) 12VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5114
Output power continuous	1500W
Output power surge	3500W
Standby current	< 1A
Input voltage	12VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Bolt eye terminals
Weight	5.6kg
Dimensions (L x W x H)	395 x 240 x 90mm

Suits lamps and fluorescents up to 1500W, 68cm televisions and VCRs, power drills, blenders, microwave ovens, belt sanders, computers etc.

Circuit Protection	
Thermal shutdown/alarm	60°C
Low battery alarm	10.5V +/- 0.5V
Low battery shutdown	10.0V +/- 0.5V
Battery high shutdown	15.5V +/- 0.5V
External fusing	210A max



Rear View



Includes remote control.

Lead supplied with unit.

NEW LOW PRICE

1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
1500W 12VDC	MI-5114	\$319.00	\$285.00	\$255.00

2000 WATT (4500 WATT SURGE) 24VDC TO 230VAC ELECTRICALLY ISOLATED

Specifications	MI-5116
Output power continuous	2000W
Output power surge	4500W
Standby current	<2.5A
Input voltage	24VDC
Output waveform	Modified sine wave
Output regulation	-
Efficiency	>90%
USB output	-
Input connection	Bolt eye terminals
Weight	6.2kg
Dimensions (L x W x H)	395 x 240 x 90mm

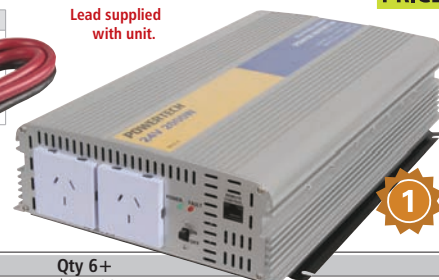
↑	Cat.
2000W 24VDC	MI-5116

Circuit Protection	
Thermal shutdown/alarm	60°C
Low battery alarm	21VDC +/- 1V
Low battery shutdown	20VDC +/- 1V
Battery high shutdown	30VDC +/- 1V
External fusing	150A max

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Lead supplied with unit.



NEW LOW PRICE

1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
2000W 24VDC	MI-5116	\$419.00	\$375.00	\$335.00

INVERTERS - PURE SINE WAVE RANGE

These inverters include advanced control logic which provides standard protection (overload, high temperature, over/under input voltage, and output short circuit) as well as a host of additional features to provide improved performance and reliability under adverse conditions. The control logic checks inverter and load conditions at start-up before applying power. It also applies a soft start feature which near eliminates the risk of inverter overload when large appliances with high in-rush currents are used. Overload detection and prevention uses a three stage alarm which acts as a timed warning so you can decrease the load before the inverter completely shuts down. High temperature protection automatically shuts the inverter down when it reaches a predetermined temperature, then restarts once

the temperature has dropped to a lower level. A power saving mode can also be activated to minimise battery drain when the AC output falls below a set power threshold; ideal for use on small appliances such as entertainment equipment. When the threshold is reached the inverter is switched to standby substantially decreasing the standby current draw. This range includes models suitable for a variety of mobile and permanent power installations. Each model has been rigorously tested (and we MEAN rigorously tested!) to ensure the best performance for your application. All models feature a standard 230VAC mains outlet as well as a USB port for powering and charging USB devices.

180 WATT 12VDC TO 230VAC PURE SINE WAVE - ELECTRICALLY ISOLATED

Specifications	MI-5700
Output power continuous	180W
Output power surge	360W
Current at no load	300mA
Current in standby mode	80mA
Power saving mode options	OFF, <20W
Input voltage	12VDC
Output wave form	Pure sine wave
Efficiency	84-91%
Output regulation	±3%
Output frequency	50Hz
USB output	5VDC @ 500mA
Size	186(L) x 117(W) x 57(H)mm
Weight	850g
Input connection	Fixed cigarette lighter lead
Remote control	None

Circuit Protection	
Output overload	Three stage alarm and shutdown
Thermal alarm & shutdown	>63° C ±3°
Thermal shutdown restart	<56° C ±3°
Battery low alarm	10.6VDC ± 0.2VDC
Battery low shutdown	10VDC ± 0.2VDC
High battery alarm	15VDC ± 0.2VDC
Input protection	Internal 25A fuse



POWERTECH 2 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
180W 12VDC	MI-5700	\$219.00	\$196.95	\$174.95

360 WATT 12VDC TO 230VAC PURE SINE WAVE - ELECTRICALLY ISOLATED

Specifications	MI-5702
Output power continuous	360W
Output power surge	720W
Current at no load	400mA
Current in standby mode	100mA
Power saving mode options	OFF, <20W
Input voltage	12VDC
Output wave form	Pure sine wave
Efficiency	84-91%
Output regulation	±3%
Output frequency	50Hz
USB output	5VDC @ 500mA
Size	230(L) x 118(W) x 57(H)mm
Weight	1.05kg
Input connection	Heavy duty screw terminals
Remote control	None

Circuit Protection	
Output overload	Three stage alarm and shutdown
Thermal alarm & shutdown	>63° C ±3°
Thermal shutdown restart	<56° C ±3°
Battery low alarm	10.6VDC ± 0.2VDC
Battery low shutdown	10VDC ± 0.2VDC
High battery alarm	15VDC ± 0.2VDC
Input overload	Internal 50A fuse



POWERTECH 2 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
360W 12VDC	MI-5702	\$269.00	\$245.00	\$219.00

360 WATT 24VDC TO 230VAC PURE SINE WAVE - ELECTRICALLY ISOLATED

Specifications:	MI-5703
Output power continuous	360W
Output power surge	720W
Current at no load	200mA
Current in standby mode	50mA
Power saving mode options	OFF, <20W
Input voltage	24VDC
Output wave form	Pure sine wave
Efficiency	84-91%
Output regulation	±3%
Output frequency	50Hz
USB output	5VDC @ 500mA
Size	230(L) x 118(W) x 57(H)mm
Weight	1.05kg
Input connection	Heavy duty screw terminals
Remote Control	None

Circuit Protection	
Output overload	Three stage alarm and shutdown
Thermal alarm & shutdown	>63° C ±3°
Thermal shutdown restart	<56° C ±3°
Battery low alarm	21.2VDC ± 0.3VDC
Battery low shutdown	20VDC ± 0.3VDC
High battery alarm	30VDC ± 0.3VDC
Input protection	Internal 25A fuse



POWERTECH 2 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
360W 24VDC	MI-5703	\$269.00	\$245.00	\$219.00

800 WATT 12VDC TO 230VAC PURE SINE WAVE - ELECTRICALLY ISOLATED

Specifications	MI-5704
Output power continuous	800W
Output power surge	1600W
Current - no load/standby	500mA/ 150mA
Power saving mode options	OFF, <20W
Input voltage	12VDC
Output wave form	Pure sine wave
Efficiency	84-91%
Output regulation	±3%
Output frequency	50Hz
USB output	5VDC @ 500mA
Size	295(L) x 165(W) x 57(H)mm
Weight	1.9kg
Input connection	Heavy duty screw terminals
Remote control	Wired 5m on/off switch with status light

Circuit Protection	
Output overload	Three stage alarm and shutdown
Thermal alarm & shutdown	>63° C ±3°
Thermal shutdown restart	<56° C ±3°
Battery low alarm	10.6VDC ± 0.2VDC
Battery low shutdown	10VDC ± 0.2VDC
High battery alarm	15VDC ± 0.2VDC
Input overload	Internal 100A fuse



POWERTECH 2 YEAR WARRANTY NEW LOW PRICE

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
600W 12VDC	MI-5704	\$429.00	\$385.00	\$345.00

SINEWAVE INVERTERS

INVERTERS - PURE SINE WAVE RANGE (CONTINUED)

1100 WATT 12VDC TO 230VAC PURE SINE WAVE - ELECTRICALLY ISOLATED

Specifications	MI-5706
Output power continuous	1100W
Output power surge	2200W
Current - no load/standby	650mA/ 175mA
Power saving mode options	OFF, <30W, <50W, <100W
Input voltage	12VDC
Output wave form	Pure sine wave
Efficiency	84-91%
Output regulation	±3%
Output frequency	50Hz
USB output	5VDC @ 500mA
Size	280(L) x 230(W) x 74(H)mm
Weight	3.6kg
Input connection	Heavy duty screw terminals
Remote control	Wired 5m on/off switch with status light

Circuit Protection	
Output overload	Three stage alarm and shutdown
Thermal alarm & shutdown	>63° C ±3°
Thermal shutdown restart	<56° C ±3°
Battery low alarm	10.6VDC ± 0.2VDC
Battery low shutdown	10VDC ± 0.2VDC
High battery alarm	15VDC ± 0.2VDC
Input overload	Internal 150A fuse

POWERTECH



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
1100W 12VDC	MI-5706	\$699.00	\$629.00	\$559.00

1500 WATT 12VDC TO 230VAC PURE SINE WAVE - ELECTRICALLY ISOLATED

Specifications	MI-5708
Output power continuous	1500W
Output power surge	3000W
Current - no load/standby	800mA/ 200mA
Power saving mode options	OFF, <30W, <50W, <100W
Input voltage	12VDC
Output wave form	Pure sine wave
Efficiency	84-91%
Output regulation	±3%
Output frequency	50Hz
USB output	5VDC @ 500mA
Size	350(L) x 230(W) x 74(H)mm
Weight	4.2kg
Input connection	Heavy duty screw terminals
Remote control	Wired 5m on/off switch with status light

Circuit Protection	
Output overload	Three stage alarm and shutdown
Thermal alarm & shutdown	>63° C ±3°
Thermal shutdown restart	<56° C ±3°
Battery low alarm	10.6VDC ± 0.2VDC
Battery low shutdown	10VDC ± 0.2VDC
High battery alarm	15VDC ± 0.2VDC
Input overload	Internal 200A fuse

POWERTECH



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
1500W 12VDC	MI-5708	\$949.00	\$855.00	\$759.00

2000 WATT 12VDC TO 230VAC PURE SINE WAVE - ELECTRICALLY ISOLATED

Specifications	MI-5710
Output power continuous	2000W
Output power surge	4000W
Standby current	1800mA
Input voltage	12VDC
Output waveform	Pure Sine wave
Efficiency	>90%
Output regulation	<+/-3%
Output frequency	50Hz
USB output	5VDC +/-5% 500mA
Dimensions	520(L) x 200(W) x 88(D)mm
Weight	5.5kg
Input Connection	Heavy duty screw terminals

Circuit Protection	
Thermal shutdown & alarm	60° C +/-4° C
Battery low alarm	10.5VDC +/-0.5VDC
Battery low shutdown	10VDC +/-0.5VDC
High battery shutdown	16VDC +/-0.5VDC
Overload	Shutdown
Short circuit	Shutdown
Battery reverse	Internal fuse

POWERTECH



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
2000W 12VDC	MI-5710	\$1199.00	\$1079.00	\$959.00

2000 WATT 24VDC TO 230VAC PURE SINE WAVE - ELECTRICALLY ISOLATED

Specifications	MI-5712
Output power continuous	2000W
Output power surge	4000W
Current - no load/standby	500mA/ 150mA
Power saving mode	OFF, <30W, <50W, <100W
Input voltage	24VDC
Output wave form	Sine wave
Efficiency	84-91%
Output regulation	±3%
Output frequency	50Hz
USB output	5VDC @ 500mA
Size	450(L) x 230(W) x 74(H)mm
Weight	5.4kg
Input connection	Heavy duty screw terminals
Remote control	Wired 5m on/off switch with status light

Circuit Protection	
Output overload	Three stage alarm and shutdown
Thermal alarm & shutdown	>63° C ±3°
Thermal shutdown restart	<56° C ±3°
Battery low alarm	21.2VDC ± 0.3VDC
Battery low shutdown	20VDC ± 0.3VDC
High battery alarm	30VDC ± 0.3VDC
Input overload	Internal 150A fuse

POWERTECH



24V IDEAL FOR TRUCKS



IMPORTANT NOTE

Do not regard the power point of an inverter as identical to a household power point. There are subtle differences. Please read the notice on page 312.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
2000W 24VDC	MI-5712	\$1199.00	\$1079.00	\$959.00

INVERTERS - PURE SINE WAVE WITH BUILT-IN SOLAR REGULATORS

Introducing our brand new 12V Pure Sine Wave inverters with built-in solar charge controller. A truly versatile inverter range that is perfect for off-grid solar power system in caravans, yachts, holiday houses, outback shed, and any standard application where inverters are used. The built-in solar charge controller means you can connect solar panels (without regulator) directly to the inverter to recharge suited batteries or battery banks. This is achieved by a single battery connection to the inverter that allows a charge and draw simultaneously or independently. The pure sine wave AC output makes them

suitable to power most mains appliances within their continuous power output. Ranging from 600W to 1500W, each model includes important protection features such as reverse polarity, battery over/under voltage, overload and over temperature. All models feature 2 x standard 230VAC mains outlets, two USB ports for powering or charging USB devices and an LCD on the unit and on the included remote control that provides important information such as Battery Voltage, DC Input Current, Output Power, Battery Level and DC Charging Current.

600 WATT 12VDC TO 230VAC PURE SINE WAVE INVERTER WITH 20A SOLAR REGULATOR

Specifications:	MI-5720
Output power continuous	600W
Output power Surge	1200W
Standby current	750mA
Input voltage	12VDC
Output voltage	230VAC
Output wave form	Pure sine wave
Efficiency	>90%
Output regulation	±3%
Output frequency	50Hz
2 x USB ports output	5VDC, 1A + 2A
Battery connection	Heavy duty screw terminals
Solar charge controller load current	20A max
Protections	Reverse polarity, battery over/under voltage, output short circuit, overload, over temperature
Dimensions	297(L) x 204(W) x 102(H) mm
Weight	2.4kg



NEW
2015



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
600W 12VDC 20A Regulator	MI-5720	\$499.00	\$449.00	\$399.00

1000W 12V TO 230VAC PURE SINE WAVE INVERTER WITH 30A SOLAR REGULATOR

Specifications	MI-5722
Output power continuous	1000W
Output power Surge	2000W
Standby current	750mA
Input voltage	12VDC
Output voltage	230VAC
Output wave form	Pure sine wave
Efficiency	>90%
Output regulation	±3%
Output frequency	50Hz
2 x USB ports output	5VDC, 1A + 2A
Battery connection	Heavy duty screw terminals
Solar charge controller load current	30A max
Protections	Reverse polarity, battery over/under voltage, output short circuit, overload, over temperature
Dimensions	379(L) x 204(W) x 102(H) mm
Weight	3.2kg



NEW
2015



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
1000W 12VDC 30A Regulator	MI-5722	\$699.00	\$629.00	\$559.00

1500W 12V TO 230VAC PURE SINE WAVE INVERTER WITH 30A SOLAR REGULATOR

Specifications	MI-5724
Output power continuous	1500W
Output power Surge	3000W
Standby current	750mA
Input voltage	12VDC
Output voltage	230VAC
Output wave form	Pure sine wave
Efficiency	>90%
Output regulation	±3%
Output frequency	50Hz
2 x USB ports output	5VDC, 1A + 2A
Battery connection	Heavy duty screw terminals
Solar charge controller load current	30A max
Protections	Reverse polarity, battery over/under voltage, output short circuit, overload, over temperature
Dimensions	429(L) x 204(W) x 102(H) mm
Weight	3.6kg



NEW
2015



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
1500W 12VDC 30A Regulator	MI-5724	\$899.00	\$809.00	\$719.00

TECH TALK!

WHAT TO BUY - SINE WAVE OR MODIFIED SINE WAVE?

"Modified" sine wave is a crude approximation of the 240V waveform, with square wave components in it. Many appliances are OK with this. Typically these are:

- Most TVs, VCRs CD/DVD players
- Fax machines
- Computers (most)
- Most switchmode power supplies
- Small power tools
- Some audio equipment
- All incandescent lighting

Sine wave is closer to mains and those inverters are much more efficient. Most appliances work OK with the lower cost modified sine.

Sine wave inverters are best for:

- Electric clocks
- Electronic weighing machines
- All other TVs
- Anything where you want to get the most out of a battery charge
- Sensitive equipment
- Mains powered PA equipment
- Plug pack powered equipment

POWERTECH SWITCHMODE POWER SUPPLIES

These units represent outstanding value for money and carry the same warranties and factory backup as the well-known brand-name products sold by us & others in the trade. You can confidently design these products into your production, as we will be definitely stocking these products for years to come. Indeed we will be expanding the range over time.

POWERTECH

Summary of features:

- High efficiency and reliability
- Broad input voltage tolerances
- IEC Standards Compliant
- Short circuit, overload/overvoltage protected
- Soft-start • Low ripple DC
- Multi-country Electrical Authority approvals



25 WATT - 12V & 24V

- 12 and 24 volt models available
- DIN rail bracket to suit use MP-3150
- 110/240V switch
- Weight: 370g



Specifications	MP-3160	MP-3162
Output voltage	12VDC	24VDC
Tolerance	10% +/-	10% +/-
Ripple & noise	100mV	100mV
Output current	2.1A	1.1A
Efficiency	76%	77%
Input frequency	47-63Hz	47-63Hz
Cold start inrush current	30A	30A
Weight	370g	370g
Dimensions (LxWxH)mm	99x97x35	99x97x35

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12 Volt	MP-3160	\$44.95	\$40.45	\$35.90
24 Volt	MP-3162	\$44.95	\$40.45	\$35.90

40 WATT - 12V & 24V

- 12 and 24 volt models available
- DIN rail bracket to suit use MP-3150
- 110/240V switch
- Weight: 450g



Specifications	MP-3165	MP-3167
Output voltage	12VDC	24VDC
Tolerance	10% +/-	10% +/-
Ripple & noise	100mV	100mV
Output current	3.5A	1.8A
Efficiency	76%	76%
Input frequency	47-63Hz	47-63Hz
Cold start inrush current	60A	60A
Weight	450g	450g
Dimensions (LxWxH)mm	129x98x38	129x98x38

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12 Volt	MP-3165	\$54.95	\$49.45	\$43.90
24 Volt	MP-3167	\$54.95	\$49.45	\$43.90

60 WATT - 12V & 24V

- 12 and 24 volt models available
- DIN rail bracket to suit use MP-3152
- Weight: 500g



Specifications	MP-3170	MP-3172
Output voltage	12VDC	24VDC
Tolerance	10% +/-	10% +/-
Ripple & noise	120mV	150mV
Output current	5A	2.5A
Efficiency	76%	79%
Input frequency	47-63Hz	47-63Hz
Cold start inrush current	60A	60A
Weight	500g	500g
Dimensions (LxWxH)mm	159x97x38	159x97x38

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12 Volt	MP-3170	\$59.95	\$53.95	\$47.90
24 Volt	MP-3172	\$59.95	\$53.95	\$47.90

60 WATT 5V/4A 12V/3A

- Provides 5 and 12 volts at the same time.
- Note: Total output must not exceed 60W
- Weight: 500g
- DIN rail bracket to suit use MP-3152



Specifications	MP-3174
Output voltage	5VDC + 12VDC
Tolerance	10% +/-
Ripple & noise	75mV + 150mV
Output current	4A (5V) + 3A (12V)
Efficiency	73%
Input frequency	47-63Hz
Cold start inrush current	60A
Weight	500g
Dimensions (LxWxH)mm	159x97x38

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3174	\$64.95	\$58.50	\$51.95

100 WATT - 12V

- 12 volt output at 100 Watts.
- 110/240V switch
- Weight: 650g
- DIN rail bracket to suit use MP-3152



Specifications	MP-3175
Output voltage	12VDC
Tolerance	10% +/-
Ripple & noise	100mV
Output current	8.5A
Efficiency	81%
Input frequency	47-63Hz
Cold start inrush current	40A
Weight	650g
Dimensions (LxWxH)mm	199x98x50

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3175	\$69.95	\$62.95	\$55.95

120 WATT - 5V & 24V DUAL OUTPUT

- Provides 5 and 24 volts at the same time.
- Note: Total output must not exceed 120W
- Automatic Input Voltage Detect.
- DIN rail bracket to suit use MP-3152



Specifications	MP-3180
Output voltage	5VDC + 24VDC
Tolerance	10% +/-
Ripple & noise	60mV + 150mV
Output current	6A (5V) + 4A (24V)
Efficiency	80%
Input frequency	47-63Hz
Cold start inrush current	40A
Weight	-
Dimensions (LxWxH)mm	199x110x50

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3180	\$99.95	\$89.95	\$79.95

150 WATT - 12V, 15V & 24V

- 12, 15 and 24 volt models available.
- Automatic input voltage detection.
- Weight: 650g
- DIN rail bracket to suit use MP-3152



Specifications	MP-3185	MP-3187	MP-3189
Output voltage	12VDC	15VDC	24VDC
Tolerance	10% +/-	10% +/-	10% +/-
Ripple & noise	180mV	180mV	240mV
Output current	12.5A	10A	6.5A
Efficiency	82%	84%	85%
Input frequency	47-63Hz	47-63Hz	47-63Hz
Cold start inrush current	60A	60A	60A
Weight	650g	650g	650g
Dims (LxWxH)mm		199x110x50	

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12 Volt	MP-3185	\$94.95	\$85.50	\$75.95
15 Volt	MP-3187	\$94.95	\$85.50	\$75.95
24 Volt	MP-3189	\$94.95	\$85.50	\$75.95

240 WATT - 12V - 18 AMP

- Delivers 18 amps at 12 Volts.
- Automatic input voltage detection.
- Inbuilt thermally controlled fan for cooling.
- Weight: 1.1kg



Specifications	MP-3250
Output voltage	12VDC
Tolerance	10% +/-
Ripple & noise	150mV
Output current	18A
Efficiency	82%
Input frequency	47-63Hz
Cold start inrush current	36A
Weight	1.1kg
Dimensions (LxWxH)mm	205x93x65

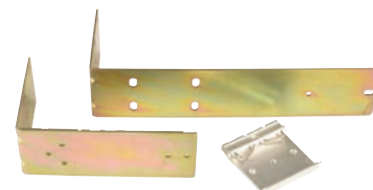
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3250	\$169.00	\$151.95	\$134.95

DIN RAIL BRACKETS

DIN RAIL BRACKETS

DIN Rail brackets to suit switchmode DIN and enclosed frame power supplies. MP-3150 suits 25 & 40 watt models MP-3152 suits 60, 100, 120, 150 watt models MP-3154 Clip is required for the brackets above, which is then attached onto the DIN rail.

Note: M3 and M4 screws are required.



↑	Type	Cat.	Qty 1+	Qty 3+	Qty 6+
1	DIN	MP-3150	\$5.95	\$5.25	\$4.75
2	DIN	MP-3152	\$6.95	\$6.25	\$5.50
	Clip	MP-3154	\$5.95	\$5.25	\$4.75

DIN RAIL POWER SUPPLIES

45 WATT INDUSTRIAL DIN RAIL SWITCHMODE POWER SUPPLIES



These compact and light weight industrial DIN rail switchmode power supplies features full temperature, voltage and current overload protection. They have a built-in EMI filter, a power on LED and operate from 85 ~ 264VAC to provide either 12 Volts DC @ 3.5A or 24 Volts DC @ 2.0Amps. Input and output connections are via a 7.5mm pitch terminal block.



Specifications	MP-3194	MP-3190	MP-3192
Input voltage	85-265VAC, 120-370VDC	85-265VAC, 120-370VDC	85-265VAC, 120-370VDC
Input frequency	47-63Hz	47-63Hz	47-63Hz
Output voltage	5VDC	12VDC	24VDC
Line regulation	1% +/-	1% +/-	1% +/-
Ripple & noise	100mV	200mV	480mV
Output current	5A	3.5A	2A
Efficiency	72%	77%	80%
Cold start inrush current	60A @ 230V	60A @ 230V	60A @ 230V
Dimensions	93x78x67mm	93x78x68mm	93x78x69mm

↑ Voltage (V)	Watts (W)	Cat.	Qty 1+	Qty 3+	Qty 6+
5	45	MP-3194	\$89.00	\$79.95	\$70.95
12	45	MP-3190	\$89.00	\$79.95	\$70.95
24	45	MP-3192	\$89.00	\$79.95	\$70.95

120 WATT INDUSTRIAL DIN RAIL SWITCHMODE POWER SUPPLIES



Specifications	MP-3195	MP-3196
Input voltage	110/240VAC (switch), 248-370VDC	
Input frequency	47-63Hz	
Output voltage	12VDC	24VDC
Line regulation	1% +/-	
Ripple & noise	80mV	
Output current	10A	5A
Efficiency	80%	84%
Cold start inrush current	40A @ 230V	
Dimensions	65x125x100mm	



↑ Voltage (V)	Watts (W)	Cat.	Qty 1+	Qty 3+	Qty 6+
12	120	MP-3195	\$149.00	\$133.95	\$118.95
24	120	MP-3196	\$149.00	\$133.95	\$118.95
48	120	MP-3197	\$149.00	\$133.95	\$118.95

DC - DC CONVERTERS

DC TO DC CONVERTER MODULES

Handy DC voltage converter modules that can step-up or step-down voltages so you can power your devices where a different power source is present. This could include powering 12VDC devices from a 6VDC motorbike battery or to run 12VDC devices from a 24VDC battery found in trucks. These units feature protection against short-circuits, overload and over-heating. They will auto-switch off in the event of overheating. Compact size and all models feature mounting holes. See our website for datasheets.

Three models to chose from:



DC TO DC STEP DOWN VOLTAGE CONVERTER MODULE

Specifications	AA-0236
Input voltage	6-28VDC
Output voltage	3-15VDC
Max output current	1.5A
Dimensions	60(L) x 45(W) x 20(D)mm



DC TO DC STEP UP VOLTAGE CONVERTER MODULE

Specifications	AA-0237
Input voltage	6-14VDC
Output voltage	11-26VDC
Max output current	2A
Dimensions	70(L) x 60(W) x 23(D)mm



24VDC TO 12VDC STEP DOWN VOLTAGE CONVERTER MODULE (NOT USER SELECTABLE)

Specifications	AA-0238
Input voltage	24VDC
Output voltage	12VDC
Max output current	1.1A
Dimensions	70(L) x 60(W) x 23(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
1.5A	AA-0236	\$24.95	\$22.35	\$19.70
2A	AA-0237	\$29.95	\$26.95	\$23.70
1.1A	AA-0238	\$24.95	\$22.35	\$19.70

24VAC/DC TO 12VDC 300MA ADAPTOR

This simple looking device consists of a tiny 40 x 25 x 19mm module with 300mm leads connected to each end. On the input side there is a 22AWG terminal block for connecting a 24V AC or DC source. On the output side, there is a 2.1mm DC plug where you have a regulated 12VDC supply, at up to 300mA.



- The AC input can be 20 - 28V, and the DC input can be 16 - 30V.

↑ Current (max.)	Cat.	Qty 1+	Qty 3+	Qty 6+
300mA	MP-3069	\$22.95	\$20.35	\$18.35

24VAC/DC TO 12VDC 1A CONVERTER

Trying to get power for CCTV and security cameras over a long run without losses is challenging to say the least. Solve the problem quickly and easily by sending 24VAC down the long run, then converting it to 12VDC when you get it where you need it.



- Connection is by screw terminals.

Specifications	MP-3350
Input	20 - 28VAC, 16 - 30VDC
Output	12VDC regulated
Output current	1A max
Dimensions	90(L) x 25(W) x 25(H)mm

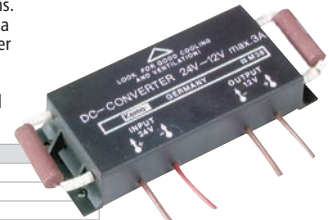
↑ Current (max.)	Cat.	Qty 1+	Qty 3+	Qty 6+
1A	MP-3350	\$34.95	\$31.45	\$29.90



24VDC TO 12VDC 3A CONVERTER

Many trucks and boats use 24V systems. These converters will allow you to run a reasonably sized 12V car-stereo or other devices from a 24V supply.

Heatsink (not included) should be used for superior performance.



Specifications	AA-0266
Short-circuit protection	
Thermal cutout	
Input voltage	24 to 26 VDC
Output voltage	12VDC
Maximum load	3A
Dimensions	135 x 50 x 24 mm
Heatsink	50 x 100 x 30 mm (rec. size) use Cat. HH-8572 or similar

↑ Current (max.)	Cat.	Qty 1+	Qty 3+	Qty 6+
3A	AA-0266	\$29.95	\$26.90	\$23.70



24VDC TO 12VDC 5A CONVERTER WITH USB

For those with a 24V vehicle such as a truck or bus, finding accessories like chargers and power supplies that run off 24V can be near impossible. This handy little device solves that problem by converting 24VDC to 12VDC so that you can use normal car accessories designed for 12V vehicles.

Connection couldn't be easier, with a cigarette lighter plug for 24V input and a cigarette lighter socket for the 12V output.

Maximum rated current is 5A, which is enough for most modest car chargers and power supplies

As a bonus the unit also has a USB output with 1A current to charge your mobile phone or other USB device.

Specifications	MP-3354
Input voltage	12 - 30VDC
Output voltage	12VDC
Max. output current	5A
Continuous output current	4A
Efficiency	85%
Dimensions	100(L) x 76(W) x 38(H)mm

↑ Current (max.)	Cat.	Qty 1+	Qty 3+	Qty 6+
5A	MP-3354	\$59.95	\$53.95	\$47.90



DC - DC CONVERTERS (CONTINUED)

24VDC TO 12VDC 10A CONVERTER

DC to DC converters are useful for running 12V devices from a 24V supply in a truck or bus. These have switchmode technology for light weight and compact design and are rated for 10A.

- Input and output is via cigarette lighter plug and socket.

Specifications	MP-3352
Input voltage	20 - 30VDC
Output voltage	13.8VDC
Max. output current	10A
Continuous output current	7A
Efficiency	85%
Dimensions	160(L) x 48(W) x 48(H)mm



Current (max.)	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
10A	MP-3352	\$74.95	\$67.50	\$59.95

24VDC TO 12VDC CONVERTERS

DC to DC converters are useful for running 12V devices from a 24V supply in a truck or bus.

These have switchmode technology for light weight and compact design, and come in a range of current ratings up to 40 amps.

Three models available:



MP-3066



MP-3061



MP-3063



Specifications	MP-3061	MP-3063	MP-3066
Current	10 Amp	20 Amp	40 Amp
Input voltage	20 - 30VDC	20 - 30VDC	20 - 30VDC
Output voltage	13.8VDC	13.8VDC	13.8VDC
Max. output current	10A	20A	40A
Continuous output current	7A	15A	30A
Efficiency	85%	85%	85%
Dimensions L x W x Hmm	160 x 48 x 48	210 x 90 x 50	200 x 192 x 70

Current (max.)	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
10A	MP-3061	\$59.95	\$53.95	\$47.90
20A	MP-3063	\$99.95	\$89.95	\$79.95
40A	MP-3066	\$149.00	\$133.95	\$118.95

MOTOR CONTROLLER

12VDC 8A DIMMER/MOTOR SPEED CONTROLLER

DC speed controllers are ideal for slowing down pumps and motors or dimming lights, but some use resistance circuits or rheostats which are very inefficient. The pulse width modulation (PWM) used in this controller allows you to vary the output from 0 to 100% while maintaining a very high efficiency. When used on motors this ensures full torque is available at very low speed and the motor won't shudder at start-up. Operates on any 12VDC system and capable of controlling devices rated at up to 8 amps.

- Internal circuitry is fully potted & the control potentiometer is splash proof making this suitable for marine environments and other harsh conditions.
- Dimensions: 97(L) x 46(W) x 47(H)mm



Current (max.)	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
12VDC 8A	MP-3209	\$29.95	\$26.90	\$23.70

LABORATORY POWER SUPPLIES

FIXED 13.8V SWITCHMODE

High current general workshop power supplies for equipment component testing, etc. Internal cooling fans assist cooling at higher temperatures.

- Banana socket style binding posts
- LED power on indication.
- Rear mounted M205 fuse
- Ideal for 12V amateur transceivers, linear amps and high powered car stereo bench testing
- 12, 20 and 40A models

Specifications	All
Input voltage range	190 - 240V AC
Output voltage range	13.8V DC regulated
Output connections	4mm Banana/Clamp Type
Recommended fuse	M205 4 amp



POWERTECH



Current (A)	Dimensions	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
12	170 x 160 x 85mm	MP-3079	\$69.95	\$62.95	\$55.95
20	170 x 190 x 85mm	MP-3078	\$99.95	\$89.95	\$79.95
40	190 x 260 x 105mm	MP-3089	\$199.00	\$178.95	\$158.95

LABORATORY POWER SUPPLIES (CONTINUED)

COMPACT SWITCHMODE

Compact size, high current, variable output and fan cooling make these the ideal power supply for your bench. They are protected against thermal overload and short circuit and will display a warning LED in the event of a fault condition. Current and voltage are displayed on separate backlit analogue meters.

Two models available:

Specifications	MP-3800	MP-3802
Voltage output	0 - 24VDC	0 - 16VDC
Current output	Max 18A, 15A continuous	Max 30A, 25A continuous
Ripple	<9mVp-p at rated load	<9mVp-p at rated load
Output regulation	<1%	<1%
Dimensions	148(W) x 162(D) x 62(H)mm	148(W) x 162(D) x 62(H)mm



↑ Voltage	Current (Max)	Cat.	Qty 1+	Qty 3+	Qty 6+
0 - 24VDC	18A	MP-3800	\$149.00	\$133.95	\$118.95
0 - 16VDC	35A	MP-3802	\$199.00	\$178.95	\$158.95

13.8V LABORATORY POWER SUPPLIES

These good looking power supplies are available in four current capacities of 5, 10, 20, and 30 amp. They use proven technology and are designed to give long service life in workshop situations.

The range features short circuit protection on the output and a fused input.

Specifications	MP-3096	MP-3097	MP-3098
Output voltage	13.8VDC	13.8VDC	13.8VDC
Rated output	5 Amps	10 Amps	20 Amps
Surge current	7 Amps	12 Amps	22 Amps
Voltage regulation	<5%	<5%	<5%
Ripple voltage	100mV	120mV	150mV



↑ Current (A)	Cat.	Qty 1+	Qty 3+	Qty 6+
5	MP-3096	\$99.95	\$89.95	\$79.95
10	MP-3097	\$139.00	\$124.95	\$110.95
20	MP-3098	\$199.00	\$178.95	\$158.95

3V TO 15VDC 40 AMP REGULATED SWITCHMODE

This high powered switch mode power supply will deliver up to 40 amps. It has a variable output voltage from 3 to 15VDC, or it can be fixed at 13.8VDC. The unit is suited to a variety of uses, especially DC powered equipment operating in a test or design environment and is ideal for car stereo work.

The unit has overload, over temperature and over voltage protection.

Output voltage and current are displayed on large, easily read seven segment LED displays and incorporates an internal cooling fan.

Specifications	MP-3090
Variable output	3V DC to 15VDC
Fixed voltage mode	13.8V DC
Max. output current	40 Amps (continuous)
Ripple & noise	10mVRMS
Load regulation	230mV @ 0 - 100% load
Measures	220(W) x 110(H) x 300(L)mm

Incredibly light for output capacity, weighing only 3.5kg



↑ Current (A)	Cat.	Qty 1+	Qty 3+	Qty 6+
40	MP-3090	\$369.00	\$335.00	\$299.00

1V TO 15VDC 0 TO 40 AMP REGULATED SWITCHMODE

A high powered switchmode power supply that delivers up to 40 amps. It has a variable output voltage from 1 to 15VDC and variable current from 0 to 40A with a dual action (coarse/fine) microprocessor controlled rotary encoder tuning for smooth, precise and fast settings. Banana sockets on the front provide up to 5A output and heavy duty binding posts on the rear for larger current applications. A control mode switch on the rear allows the user to select between Normal, Preset (5V, 13.8 or 15VDC), Set (User-defined) modes for quick access to frequently used V settings, or Remote Control. The remote control feature offers a wide range of operation possibilities for sophisticated applications to adjust the voltage, current and on/off control (Additional components are necessary, which are explained in the user manual). An intelligent fan control program checks the fan at power on and adapts the right speed to ensure a quiet and efficient operation, and the isolated ground construction allows parallel or series connection of additional power supplies.

- High RFI immunity and excellent EMI
- Overload, short circuit, over temperature and tracking over voltage protected
- Incredibly light, weighing only 2.6kgs.

Specifications	MP-3094
Variable output voltage	1VDC to 15VDC
Variable output current	0A to 40A
Max. output current	40 Amps (continuous)
Ripple & noise	5mV RMS
Load regulation	50mV @ 10 - 100% load.
Dimensions	200(W) x 90(H) x 215(L)mm.



↑ Current	Cat.	Qty 1+	Qty 3+	Qty 6+
40A	MP-3094	\$469.00	\$425.00	\$379.00

LABORATORY POWER SUPPLIES (CONTINUED)

0 TO 32VDC 0 TO 3 AMP REGULATED VARIABLE

This precision, automatic transfer type power supply provides stable voltage and current with regulated output voltage. Output voltage is adjustable from 0 up to 32VDC in constant voltage mode and output current is adjustable from 0 to 3 Amps in constant current mode. The unit features an uncluttered control panel with LCD meter, voltage, and current adjustment knobs. Output connection is by screw down terminals or banana sockets. This versatile PSU can be utilised in many areas of scientific research, education, electronics, & electrical equipment repair.

- Backlit LCD

Specifications	MP-3086
Output voltage	0 - 32VDC
Output current	0 - 3 Amps
Ripple & noise	<1mVRMS
Dimensions	130(W) x 160(H) x 320(D)mm
Weight	6.5kg

Current	Cat.	Qty 1+	Qty 3+	Qty 6+
3A	MP-3086	\$199.00	\$178.95	\$158.95



0 TO 32VDC DUAL OUTPUT, DUAL TRACKING

This automatic constant-voltage/constant-current transfer type power supply is effectively two 0-32VDC 3 Amp power supplies in one case. The two outputs can be operated independently, connected in parallel, or series for multiple output currents and voltages. Coarse and fine voltage controls are provided on both outputs, along with current limit control. Both outputs have independent digital voltage and current meters.

- Displays are backlit and extremely easy to read.

Specifications	MP-3087
Output voltage	2 x 0 - 32VDC
Output current	0 - 3 Amps (x 2)
Ripple and noise	<1mVRMS
Load regulation	10mV max.
Dimensions	185(H) x 260(W) x 400(D)mm
Weight	10kg approx

Current	Cat.	Qty 1+	Qty 3+	Qty 6+
3A	MP-3087	\$379.00	\$345.00	\$305.00



POWER SUPPLIES - SWITCHMODE

SWITCHMODE - MAINS TO CIGARETTE LIGHTER SOCKET

For powering 12V equipment such as car coolers and camping fridges from a mains AC power source. Supplied with a 1.5m output lead with cigarette socket output, making connection simple and easy. Input voltage: 240VAC

12VDC 7.5A Cat. MP-3575
Dimensions: 157(L) x 90(W) x 57(H)mm

12VDC 12.5A Cat. MP-3573
Dimensions: 200(L) x 100(W) x 65(H)mm

Current	Cat.	Qty 1+	Qty 5+	Qty 10+
7.5A	MP-3575	\$39.95	\$35.90	\$31.90
12.5A	MP-3573	\$99.95	\$89.95	\$79.95



5A REGULATED 12VDC CAR POWER ADAPTOR

This adaptor will power MP3 players, games, CD players, appliances or anything else that requires 5 - 12VDC at up to 5A. It's also fuse protected & includes four plug adaptors to suit most popular devices.

- Four plug adaptors
- Selectable voltage: 5, 6, 9 & 12VDC
- Fuse protected
- Lead length: 1400mm



Current	Cat.	Qty 1+	Qty 3+	Qty 6+
5A	MP-3478	\$39.95	\$35.90	\$31.90

3A - DIGITAL CAR POWER ADAPTOR WITH LCD

Offers 7 different DC voltages with 3A continuous output, plus a USB charging output suitable for the latest smart phones and i-gadgets. The microprocessor controlled design provides accurate digital read outs of vehicle's battery voltage, selected output voltage and power used by the load. The vehicle battery is protected against over discharge by a low voltage cut out feature. LCD features selectable backlight colours.

- Input: 12V or 24V battery systems
- Output: 1.5/3/4.5/5/6/7.5/9/12VDC (12VDC output only with 24V input)
- Output current: 3A max, (USB: 500mA max)
- Dimensions: 98(L) x 57(W) x 17(H)mm



Current	Cat.	Qty 1+	Qty 3+	Qty 6+
3A	MP-3673	\$49.95	\$44.90	\$39.90

6A REGULATED 12VDC CAR/TRUCK POWER ADAPTOR

Supplies a regulated 12VDC output at up to 6 amps, more than enough for a portable DVD player, TV, LCD screen or any other 12 volt device. You can also use it to run a DVD player from your car's 12 volt supply, as many portable DVD players will only run on a regulated 12 volt supply and will self-destruct if connected to the typical 13.8 volts of a car's electrical system. Supplied with 7 DC connectors

Specifications	MP-3064
Input	11-28VDC
Output	Regulated 12VDC @ 6A
Lead length	Input - 450mm output - 1400mm
Case size	138(L) x 60(W) x 32(H)mm



Current	Cat.	Qty 1+	Qty 3+	Qty 6+
6A	MP-3064	\$69.95	\$62.95	\$55.95

CAR POWER SUPPLIES

12VDC 1.2A CAR POWER ADAPTOR

Use your car's cigarette lighter socket to power or charge a variety of portable electronic devices such as mobile phones, personal audio players, handheld video game consoles and PDAs. Choose from 7 different DC voltages and 6 different adaptor tips.



Specifications	MP-3678
Input voltage	12VDC
Output voltage	1.5, 3, 4.5, 6, 7.5, 9 or 12VDC
Output current	1.2A
Cable length	1.8m
Dimension	99(L) x 55(W) x 45(D)mm



Current	Cat.	Qty 1+	Qty 3+	Qty 6+
1.2A	MP-3678	\$19.95	\$17.95	\$15.70

3A CAR POWER ADAPTOR WITH USB OUTLET

Select a DC voltage and adaptor tip combination to power or charge a wide range of consumer electronics goods such as personal audio players, digital cameras, handheld gaming consoles, mobile phones, PDAs, PSP, etc. Many modern devices will also charge via the USB outlet.

SEE OUR RANGE OF
IN-CAR & CIGARETTE
LIGHTER CHARGERS
ON PAGES
294 TO 297

Specifications	MP-3671
Input voltage	12VDC
Output voltage	3, 4.5, 5, 6, 7.5, 9.5, 12VDC
Output current	3A
USB output	5VDC, 1A
Power Indicator	LED
Dimensions	80(L) x 76.2(W) x 33(D)mm



Current	Cat.	Qty 1+	Qty 3+	Qty 6+
3A	MP-3671	\$29.95	\$26.90	\$23.70

ECLIPSE ALKALINE BATTERIES



Eclipse batteries are made to the same specifications of those well known expensive brands advertised on TV, but at a realistic price. We are very, very proud of these products and stand behind them unconditionally. If you try them & are disappointed with them for any reason we will give you a full refund and another set of ECLIPSE batteries to see if you can work out what went wrong!

ALKALINES - AAA



SB-2426
• Blister pack of 2 x AAA



SB-2328
• Contains 40 x AAA

ALKALINES - AA



SB-2332
• Contains 40 x AA



SB-2329
• Contains 24 x AA

ALKALINES - C

SB-2416
• Blister pack of 2 x C



SB-2320
• Contains 4 x C



ALKALINES - D

SB-2418
• Blister pack of 2 x D



SB-2321
• Contains 4 x D



ALKALINES - 9V



SB-2423
• Blister pack of 1 x 9V

SB-2417
• Contains 6 x 9V



↑	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	2	AAA	SB-2426	\$1.95	\$1.75	\$1.55
	4	AAA	SB-2413	\$3.95	\$3.45	\$3.15
	12	AAA	SB-2334	\$7.95	\$6.95	\$6.25
	24	AAA	SB-2331	\$12.95	\$11.35	\$10.35
	40	AAA	SB-2328	\$17.95	\$15.95	\$14.35

↑	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	2	C	SB-2416	\$3.95	\$3.45	\$3.15
	4	C	SB-2320	\$6.95	\$6.25	\$5.50

↑	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	2	D	SB-2418	\$3.95	\$3.45	\$3.15
	4	D	SB-2321	\$7.95	\$7.10	\$6.25

↑	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	2	AA	SB-2424	\$1.95	\$1.75	\$1.55
	4	AA	SB-2425	\$3.95	\$3.45	\$3.15
	12	AA	SB-2333	\$7.95	\$6.95	\$6.25
	24	AA	SB-2329	\$12.95	\$11.35	\$10.35
	40	AA	SB-2332	\$17.95	\$15.95	\$14.35

↑	Pack	Size	Cat.	Qty 1+	Qty 10+	Qty 20+
	1	9V	SB-2423	\$3.95	\$3.45	\$3.15
	6	9V	SB-2417	\$13.95	\$12.35	\$10.95

PREMIUM ALKALINE BATTERIES

PANASONIC® BATTERIES

Panasonic® is not a name that you instantly associate with high performance batteries, but we have come to learn that in fact Panasonic® has been manufacturing batteries for many many years, providing OEM manufacturing and strong research and development for many of the big brands you know and recognise. But now they have decided to keep their latest technology for themselves, and launch into the market under their own brand.

These new Panasonic® Evolta® batteries currently hold an internationally recognised record for the longest lasting AA alkaline battery - yes we know that everyone makes these sorts of claims, but they have the test results to verify it! If you don't believe us, test them for yourself, we are sure you will be impressed!

Having said that, the prices are quite competitive, considering the outstanding performance of the Evolta® product. We are confident that with a name like Panasonic® you can be confident about quality! So if using brand-name batteries is important to you we would love you to try the Panasonic® Evolta® alkaline range.



Panasonic
EVOLTA

↑	Type	Pack	Cat.	Qty 1+	Qty 10+	Qty 20+
	AAA	2	SB-2906	\$3.45	\$3.05	\$2.75
	AAA	4	SB-2908	\$6.45	\$5.75	\$4.95
	AAA	8	SB-2910	\$10.95	\$9.75	\$8.75
	AA	2	SB-2900	\$3.45	\$3.05	\$2.75
	AA	4	SB-2902	\$6.45	\$5.75	\$4.95
	AA	8	SB-2904	\$10.95	\$9.75	\$8.75
	AA NEW	20	SB-2905	\$21.95	\$19.70	\$17.35
	C	2	SB-2912	\$6.95	\$6.25	\$5.50
	D	2	SB-2914	\$6.95	\$6.25	\$5.50
	9V	ea	SB-2916	\$6.95	\$6.25	\$5.50



SB-2910



SB-2900



SB-2912



SB-2914



SB-2916

ALKALINE & CORDLESS PHONE BATTERIES

ALKALINE BATTERIES (CONTINUED)

6, 9, 12V ALKALINE BATTERIES

- Blister packed

(A) 12V CAR ALARM REMOTE CONTROL BATTERY - A23

TYPE/L1028/SLR23/GP23A (HOUSE BRAND)

As used in remote controls for most car alarms. Size 9.5mm dia x 27mm high. See photo "A".



Type	Cat.	Qty 1+	Qty 10+	Qty 20+
A23	SB-2420	\$1.95	\$1.75	\$1.55

(B) 12V THIN CAR ALARM REMOTE CONTROL BATTERY - L828 TYPE

As used in new generation small sized car alarm remote controls. Size 8mm dia x 28mm high. See photo "B".

Type	Cat.	Qty 1+	Qty 10+	Qty 20+
L828	SB-2422	\$3.20	\$2.83	\$2.45

(C) 6V ALKALINE BATTERY - L1325/4LR44 TYPE

These are the same size as A544 batteries. Used mainly in cameras. Size 13mm dia x 25mm. See photo "C".

Type	Cat.	Qty 1+	Qty 10+	Qty 20+
L1325/4LR44	SB-2415	\$3.25	\$2.90	\$2.60

(D) 6V ALKALINE BATTERY

No L1016/11A. Size: 9.5mm dia x 15mm high. See photo "D".

Type	Cat.	Qty 1+	Qty 10+	Qty 20+
L1016/11A	SB-2421	\$2.95	\$2.60	\$2.30

(E) 9V ALKALINE BATTERY - GP29A/L822 TYPE

General purpose remote control battery. Size: 7.7(dia) x 21.4(L)mm Capacity 18mAh. See photo "E".

Type	Cat.	Qty 1+	Qty 10+	Qty 20+
GP29A/L822	SB-2427	\$3.95	\$3.45	\$3.15

12V PANASONIC ALKALINE

Car alarm battery.

- LRV08, A23, L1028.



Type	Cat.	Qty 1+	Qty 10+	Qty 20+
A23	SB-2970	\$2.95	\$2.60	\$2.30

N SIZE EXTRA HEAVY DUTY ZINC CHLORIDE - VINNIC

These batteries are superior to standard carbon-zinc cells but are much cheaper and have a longer shelf life.

- Blister Packed



Type	Pack	Cat.	Qty 1+	Qty 10+	Qty 20+
N	2	SB-2346	\$3.45	\$3.05	\$2.75

ECLIPSE LANTERN BATTERY

A 6 volt heavy duty battery as used in many torches including the very popular Dolphin.

- Carbon zinc battery



Type	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-2394	\$5.45	\$4.90	\$4.30

CORDLESS TELEPHONE BATTERIES

TELEPHONE BATTERIES TO SUIT UNIDEN PHONES

A collection of replacement batteries suitable for Uniden cordless phones. All are heat shrink wrapped with suitable connectors so it's a simple drop in replacement.



2.4V 800mAh Ni-MH - 80AAM2BMS SB-1651

2.4V 650mAh Ni-MH

CTB97 - 65AAAH2BMS

Suits Uniden models: BT-652, BT652, CTB97 SB-1653

2.4V 650mAh Ni-MH

CTB96 - 65AAAH2BMJ

SB-1654

Type	Cat.	Qty 1+	Qty 10+	Qty 20+
2.4V / 800mAh	80AAM2BMS SB-1651	\$17.95	\$15.95	\$14.35
2.4V / 650mAh	65AAAH2BMS SB-1653	\$17.95	\$15.95	\$14.35
2.4V / 650mAh	65AAAH2BMJ SB-1654	\$17.95	\$15.95	\$14.35

CORDLESS TELEPHONE BATTERIES - EXTENDED RANGE

Replacement batteries for cordless telephones.

3.6V 600mAh Ni-MH

- Nominal voltage 3.6V • Nominal capacity 600mAh
- Bank of three batteries next to each other
- Dimensions: 30(H) x 14(W) x 41(L)mm
- Supplied with lead and two pin Mitsumi plug.
- Suits Panasonic KXT3716, 3806, 3826, 4026, 4027, 4036, 4046, 4047, 4300 & 4317
- Uniden CT301, XC360, XC310, XC320, XC340, XC610
- Also suits various Sony & James Hardie phones.



Type	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1645	\$12.95	\$11.35	\$10.35

3.6V 650mAh Ni-MH

- Nominal voltage: 3.6V
- Suitable for Panasonic KXTC1220/KXTC1230
- GP Battery No. GP65AAAH3BMS



Type	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1646	\$15.95	\$14.35	\$12.70

3.6V 1000mAh Ni-Cd

- Nominal voltage: 3.6V
- Suitable for Panasonic KX-TC1801 - KT-TC1890
- GP Battery No. GP100AAS3BMS



Type	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1648	\$17.95	\$15.95	\$14.35

3.6V 850mAh Ni-MH

- Nom voltage 3.6V
- Suitable for Uniden WDECT2315 - WDECT2310, DSS5805, 5855, 5865
- GP battery No. GP85AAALH3BMS



Type	Cat.	Qty 1+	Qty 10+	Qty 20+
	SB-1634	\$28.95	\$25.95	\$22.95

LET'S FIND EVERYTHING YOU NEED!

FROM
\$23.95
QP-2253



ALL IN ONE BATTERY TESTER P331

FROM
\$6.95
MP-3083



BATTERY BANK WITH USB P332

FROM
\$0.80
PH-9260



BATTERY HOLDERS P331

FROM
\$4.45
HB-6359



BATTERY CONTAINERS P331

LITHIUM BATTERIES

ECLIPSE PLUS LITHIUM AAA 1.5V BATTERY PACKS

This range of Lithium Iron Disulfide (LiFeS₂) batteries pack 5-6 times the capacity of their alkaline equivalents in high power applications. Using these represents a 40-60% cost saving over alkaline batteries. Refer to our website for discharge performance specifications with comparison to leading brand name Lithium batteries.

- Not rechargeable

Specifications	
Capacity	>1200mAh
Max constant load	1500mA
Max pulse load	2000mA
Terminal voltage	1.5V



↑	Pkt.	Cat.	Qty 1+	Qty 10+	Qty 20+
AAA	2	SB-2351	\$9.95	\$8.75	\$7.75
AAA	4	SB-2352	\$17.95	\$15.95	\$14.35

ECLIPSE PLUS LITHIUM AA 1.5V BATTERY PACKS

This range of Lithium Iron Disulfide (LiFeS₂) batteries pack 5-6 times the capacity of their alkaline equivalents in high power applications. Using these represents a 40-60% cost saving over alkaline batteries. Refer to our website for discharge performance specifications with comparison to leading brand name Lithium batteries.

- Not rechargeable

Specifications	
Capacity	>3000mAh
Max constant load	2000mA
Max pulse load	3000mA
Terminal voltage	1.5V



↑	Pkt.	Cat.	Qty 1+	Qty 10+	Qty 20+
AA	2	SB-2355	\$11.95	\$10.70	\$9.50
AA	4	SB-2357	\$19.95	\$17.70	\$15.70

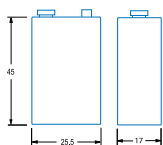
ECLIPSE LITHIUM 9V BATTERY 1200MAH

As you know, lithium batteries are essential for such things as smoke detectors, wireless alarm systems, garage door opener remotes etc. They are a bit more expensive, but your family's lives are worth a couple of bucks.

Available in single or twin pack:

- Not rechargeable.

Please note that the physical size of these batteries is slightly different to standard 9V batteries.



↑	Pkt.	Cat.	Qty 1+	Qty 8+	Qty 15+
9V	Single	SB-2397	\$14.95	\$13.35	\$11.70
9V	2	SB-2396	\$25.95	\$23.35	\$20.70

1.5V LITHIUM LONG LASTING BATTERIES

The perfect power source for high drain current draw cameras, camcorders, personal stereos, mobile phones, palm top computers and TVs.

- Up to 3 times the life of any alkaline battery.
- Up to 10 times the life of ordinary carbon zinc battery
- Guaranteed shelf life up to 10 years.
- 1.5V, 1.4Amp hour (AA).
- Blister Packed
- Not rechargeable.

Made in Singapore **Energizer**



↑	Pkt.	Cat.	Qty 1+	Qty 8+	Qty 15+
AAA	2	SB-2372	\$18.95	\$16.95	\$14.95
AA	2	SB-2375	\$18.95	\$16.95	\$14.95

CR123A 3V LITHIUM BATTERIES 6 PACK

Contains 6 CR123A lithium camera batteries, commonly used in LED torches and cameras.

- Not rechargeable



↑	Pkt.	Cat.	Qty 1+	Qty 8+	Qty 15+
CR-123A	6	SB-2324	\$17.95	\$15.95	\$14.35

LITHIUM CAMERA BATTERIES

Blister Packed

- Not rechargeable.

Cat.	Type	Volt	Current
SB-2400	CR123A	3V	1300mA
SB-2401	CR-P2	6V	1300mA
SB-2402	2CR5	6V	1300mA
SB-2404	CR2	3V	750mA



↑	Cat.	Qty 1+	Qty 8+	Qty 15+	
	CR123A	SB-2400	\$4.95	\$4.45	\$3.90
	CR-P2	SB-2401	\$9.95	\$8.75	\$7.75
	2CR5	SB-2402	\$9.95	\$8.75	\$7.75
	CR2	SB-2404	\$4.95	\$4.45	\$3.90

PANASONIC® LITHIUM CAMERA BATTERIES

- Not rechargeable.

Cat.	Type	Volt	Current
SB-2980	CR123	3V	1500mA
SB-2982	CR2	3V	800mA



Panasonic

⬆	Cat.	Qty 1+	Qty 10+	Qty 20+	
	CR123	SB-2980	\$9.95	\$8.75	\$7.75
	CR2	SB-2982	\$9.95	\$8.75	\$7.75

TECH TALK!

LITHIUM CAN BE DANGEROUS

All the batteries on this page are non-rechargeable. Do not try to recharge any of these lithium batteries.

There are basically two types of lithium batteries: rechargeable and non-rechargeable. Rechargeable batteries are usually referred to as Lithium-Ion or Lithium Polymer. The ONLY WAY to recharge such batteries is with a dedicated charger for the particular battery size, such as CRV-3 or CR123A types. Such chargers are specifically designed to strictly manage the special charge rate requirements for rechargeable lithium ion or lithium polymer cells.

Standard Lithium non-rechargeable batteries are not designed to be recharged - even with a Lithium-Ion or Lithium-Polymer charger. Indeed there is a VERY HIGH likelihood that the battery will violently EXPLODE if any attempt is made to charge a standard Lithium battery. DO NOT try to recharge ANY lithium battery with an undedicated charger, such as lead acid or Ni-Cd charger, under any circumstances. All batteries on this page are non-rechargeable. Do not try to recharge any of these lithium batteries.

COMPUTER BACKUP

3.6V LITHIUM COMPUTER BACKUPS

These high capacity batteries are used in many desktop and notebook computers to retain date, time and configuration information while the computer is switched off. They are also useful where long shelf life is important or when the battery is to be fitted into difficult or sealed access areas. Storage life is up to 10 years.

- 14.5mm diameter
- Not rechargeable.



Cat.	Size	Capacity (mAh)	Max Current (mA)	Height	Connect (mm)
SB-1770	Half AA	900	50	25mm	Nipple
SB-1771	Half AA	900	50	25mm	Axial Lead
SB-1774	AA	2000	100	50mm	Nipple
SB-1775	AA	2000	100	50mm	Axial Lead

↑	Cat.	Qty 1+	Qty 10+	Qty 20+
Half AA	SB-1770	\$11.95	\$10.70	\$9.50
Half AA	SB-1771	\$13.95	\$12.35	\$10.95
AA	SB-1774	\$16.95	\$14.95	\$13.35
AA	SB-1775	\$18.95	\$16.95	\$14.95

3.6V LITHIUM

Supplied with PC mount pins. Not rechargeable.

Specifications	SB-2540
Operating voltage	3.6 to 3.7V
Termination voltage	2.5V
Pin spacing	25mm
Capacity	0.6Ah to plus 85°C
Temperature	minus 40°C
Storage period	10 years.
Size	24(W) x 14(Dia)mm.



↑	Cat.	Qty 1+	Qty 10+	Qty 20+	
	3.6V Lithium	SB-2540	\$15.95	\$14.35	\$12.70

BUTTON & COIN CELL BATTERIES

BATTERY TYPE COMPARISON

TYPE (CHEMISTRY)	COMMON NAME(S)	NORMAL CELL VOLTS	INTERNAL RESISTANCE	MAX DISCHARGE RATE	PROS & CONS	TYPICAL APPLICATION
Carbon-Zinc	Standard Duty	1.5	MEDIUM	MEDIUM	Low cost, available in various sizes; but terminal voltage drops steadily during cell life.	Torches, radios, toys, & general purpose, electronic equipment.
Zinc Chloride	Heavy Duty	1.5	LOW	MEDIUM TO HIGH	Low cost, better at higher discharge rates & at lower temperatures; terminal voltage still drops.	Cassette tape players/recorders & other motor-driven items, clocks, calculators, remote controls, multimeters, etc.
Alkaline - Zinc-Manganese Dioxide	Alkaline	1.5	VERY LOW	HIGH	Better for high continuous or pulsed loads and at low temperatures; but terminal voltage again drops.	Heavy duty torches, photoflash units, battery shavers, digital cameras, hand-held transceivers, portable CD players etc.
Lithium-Manganese Dioxide	Lithium	3.0	LOW	MEDIUM TO HIGH	High energy density, very low self-discharge rate (excellent shelf life) good temperature tolerance.	Watches, calculators, cameras (digital & film), DMMs, and other test instruments.
Zinc-Mercuric Oxide	Mercury Cel	1.35	LOW	LOW	High energy density (compact); very flat discharge curve; good at higher temperatures.	Calculators, pagers, hearing aids, watches, test instruments (voltage reference).
Zinc-Silver Oxide	Silver Oxide Cell	1.5	LOW	LOW	High energy density (very compact); very flat discharge curve; reasonable at lower temperatures.	Calculators, pagers, hearing aid, watches, test instruments (voltage reference).
Zinc-Oxygen	Zinc Air Cell	1.45	MEDIUM	LOW	High energy density, very lightweight; flat discharge curve; but must have access to air.	Hearing aids and pagers.

BUTTON CELL BATTERIES

1.5V SILVER OXIDE BATTERIES

These batteries generally have a protective layer of silicon on them. Please wipe with a cloth and avoid touching with fingers before installing them.



Type #	Capacity	Eveready	Vinnic	Maxell	IEC	Other	Pk.	Dia x H(mm)	Cat.	Qty 1+	Qty 8+	Qty 15+
357	155mA	357	S1154E	SR44W	SR44	613/RW12/32/S1154S	ea	11.6 x 5.4	SB-2512	\$1.95	\$1.75	\$1.55
362	21mA	362	S721E	S721SW	SR58	SG11/SR720/532/19/RW310	ea	7.9 x 2.1	SB-2530	\$1.95	\$1.75	\$1.55
364	20mA	364	S621E	S621SW	SR60	SG1/SR620/531/31/RW320	ea	6.8 x 2.1	SB-2501	\$1.95	\$1.75	\$1.55
371	44mA	-	-	SR920SW	SR69	SG6/537/30/RW315	ea	9.5 x 2.1	SB-2534	\$1.95	\$1.75	\$1.55
377	27mA	-	-	SR626SW	SR66	SG4/37	ea	6.8 x 2.6	SB-2504	\$1.95	\$1.75	\$1.55
389	60mA	-	-	SR1130SW	SR54	RW49/AG10/G10/SG10/554/390	ea	11.6 x 3.05	SB-2508	\$1.95	\$1.75	\$1.55
391	40mA	-	-	SR1121W	SR55	SG8/68/553/28/RW40	ea	11.6 x 2.1	SB-2542	\$1.95	\$1.75	\$1.55
392	38mA	-	-	SR41W	SR41	SG3/63/547/2/RW27/RW47	ea	7.9 x 3.6	SB-2502	\$1.95	\$1.75	\$1.55
393	65mA	-	-	SR754W	SR48	SG5/65/546/15/RW28/RW48	ea	7.9 x 5.4	SB-2532	\$1.95	\$1.75	\$1.55
396	25mA	-	-	SR726W	SR59	SG2/556/29/RW411	ea	7.9 x 2.6	SB-2510	\$1.95	\$1.75	\$1.55
399	42mA	-	-	SR927W	SR57	SG7/SR926/543/35/RW413	ea	9.5 x 2.7	SB-2536	\$1.95	\$1.75	\$1.55

1.5V ALKALINE BATTERIES



Type #	Capacity	Eveready	Vinnic	Maxell	VARTA	Other	Pk.	Dia x H(mm)	Cat.	Qty 1+	Qty 8+	Qty 15+
LR936	45mA	-	-	LR45	-	AG9	ea	9.5 x 3.6	SB-2513	\$1.50	\$1.35	\$1.20
LR43	90mA	166	-	LR43	V12GA	-	ea	11.6 x 4.2	SB-2514	\$1.50	\$1.35	\$1.20
LR44	120mA	A76	-	LR44	V13GA	357A	ea	11.6 x 5.4	SB-2516	\$1.50	\$1.35	\$1.20
LR44 (Panasonic)	120mA	LR44	-	LR44	V13GA	357A	ea	11 x 5	SB-2950	\$2.95	\$2.60	\$2.30

3V LITHIUM BATTERIES

- Not rechargeable.



Type #	Capacity	Pk.	Dia x H(mm)	Cat.	Qty 1+	Qty 8+	Qty 15+
CR1220	30mA	ea	12 x 2.0	SB-2527	\$2.95	\$2.60	\$2.30
CR1616	45mA	ea	16 x 1.5	SB-2525	\$2.95	\$2.60	\$2.30
CR1620	50mA	ea	16 x 2.0	SB-2526	\$2.95	\$2.60	\$2.30
CR1632	150mA	ea	16 x 3.2	SB-2529	\$2.95	\$2.60	\$2.30
CR2016	60mA	ea	20 x 1.6	SB-2524	\$2.95	\$2.60	\$2.30
CR2025	110mA	ea	20 x 2.5	SB-2520	\$2.95	\$2.60	\$2.30
CR2032	140mA	ea	20 x 3.2	SB-2522	\$2.95	\$2.60	\$2.30
CR2450 (Eclipse)	575mA	ea	25.5 x 5.0	SB-2946	\$5.95	\$5.25	\$4.75
CR2430	270mAh	ea	24.5 x 3.0	SB-2523	\$2.95	\$2.60	\$2.30

3V LITHIUM BATTERIES - PANASONIC

- Not rechargeable.



Panasonic

Type #	Capacity	Pk.	Dia x H(mm)	Cat.	Qty 1+	Qty 10+	Qty 20+
CR2016	90mAh	ea	20 x 1.6	SB-2940	\$4.95	\$4.45	\$3.90
CR2025	165mAh	ea	20 x 2.5	SB-2942	\$4.95	\$4.45	\$3.90
CR2032	220mAh	ea	20 x 3.2	SB-2944	\$4.95	\$4.45	\$3.90

STANDARD BUTTON CELL HOLDER

PCB mount holder, suits button cells, with diameter up to 20mm, which includes the 3V lithium batteries.



*May vary slightly to one shown.

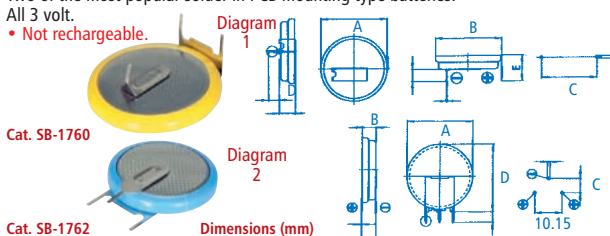
↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	PH-9238	\$1.95	\$1.75	\$1.55

3V PCB MOUNTING LITHIUM COIN BATTERIES

Two of the most popular solder-in PCB mounting type batteries.

All 3 volt.

- Not rechargeable.



Capacity	Part No.	Diag.	Cat.	A	B	C	D
200mAh	CR2032VC	2	SB-1762	20	3.2	3.5	21
400mAh	CR2430-HC-33	1	SB-1760	24.5	24.7	17.8	9.45
540mAh	CR2540NRH	2	SB-1622	24.5	24.5	17.8	11.35

↑	Part No.	Capacity	Cat.	Qty 1+	Qty 10+	Qty 20+
	CR2430-HC-33	400mAh	SB-1760	\$3.95	\$3.45	\$3.15
	CR2032VC	200mAh	SB-1762	\$2.45	\$2.15	\$1.95
	CR2540NRH	540mAh	SB-1622	\$5.75	\$4.95	\$4.60

NICKEL METAL HYDRIDE NI-MH RECHARGEABLE BATTERIES

Nickel Metal Hydride (Ni-MH) batteries offer superior features to nickel cadmium (Ni-Cd) rechargeable batteries. These features include:

- No memory effect
- Higher current capacities
- High drain performance

AAA SIZE

AA SIZE



*Supplied in Blister Packs

Size	Current Capacity mAh	V	Per	Charging Rate Slow 15 Hours	Charging Rate Standard 5 Hours	Charging Rate Fast 1.5 Hours	Terminal Type	Cat. No.	Qty 1+	Qty 8+	Qty 15+
AAA	900	1.2	EA	90	270	900	Nipple	SB-1723	\$2.95	\$2.60	\$2.30
AAA	900	1.2	EA	90	270	900	Solder tabs	SB-1724	\$3.95	\$3.45	\$3.15
AA	2000	1.2	EA	200	650	2000	Nipple	SB-1706	\$4.25	\$3.75	\$3.30
AA	2000	1.2	EA	200	650	2000	Solder tabs	SB-1708	\$4.45	\$3.95	\$3.45
AA	2400	1.2	EA	240	750	2400	Solder tabs	SB-1728	\$4.95	\$4.45	\$3.90
AA	2500	1.2	EA	260	800	2500	Nipple	SB-1744	\$5.95	\$5.25	\$4.75
AAA	900	1.2	Pkt 4*	90	270	900	Nipple	SB-1739	\$10.95	\$9.75	\$8.75
AA	2000	1.2	Pkt 4*	200	650	2000	Nipple	SB-1737	\$15.95	\$14.35	\$12.70
AA	2500	1.2	Pkt 4*	260	800	2500	Nipple	SB-1738	\$18.95	\$16.95	\$14.95
Size	Current Capacity mAh	V	Per	Charging Rate Slow 15 Hours	Charging Rate Standard 5 Hours	Charging Rate Fast 1.5 Hours	Terminal Type	Cat. No.	Qty 1+	Qty 8+	Qty 15+
4/3 A	3500	1.2	EA	350	1050	3500	Solder tabs	SB-1711	\$12.95	\$11.35	\$10.35
SUB C	3300	1.2	EA	350	670	3300	Solder tabs	SB-1611	\$8.95	\$7.95	\$6.95
D	5000	1.2	EA	500	1500	5000	Nipple	SB-9010	\$12.95	\$11.35	\$10.35
D	9000	1.2	Pkt 2*	900	3000	9000	Nipple	SB-1734	\$44.95	\$40.45	\$35.90
D	9000	1.2	EA	900	3000	9000	Solder tabs	SB-2462	\$23.95	\$21.35	\$18.95
4/3 A	900	1.2	EA	90	270	900	Solder tabs	SB-1717	\$4.95	\$4.45	\$3.90
SUB C	2400	1.2	EA	240	740	2400	Solder tabs	SB-1617	\$6.95	\$6.25	\$5.50
9V	200	8.4	EA	20mA	60mA		Clip	SB-2467	\$11.95	\$10.70	\$9.50
C	4500	1.2	Pkt 2*	450	1500	4500	Nipple	SB-1733	\$18.95	\$16.95	\$14.95

Note 1: Cat. SB-1617 high power battery with peak pulse discharge up to 30A and constant current discharge to 15A. All Sub C & D size Ni-MH batteries have new heavy duty solder tabs.

PANASONIC ENELOOP NI-MH PRE-CHARGED RECHARGEABLE BATTERIES

This range of Panasonic Eneloop batteries have numerous advantages over regular rechargeables. Key characteristics include low self-discharge, they are pre-charged so can be used right out of the packet, and can be recharged up to 1800 times. After 5 years of storage they will retain 70% of their capacity once fully charged. A far more environmentally friendly option than churning through dozens of alkalines.

PANASONIC ENELOOP NI-MH
1.2V 2000MAH - AA 2 PACK
SB-2930

PANASONIC ENELOOP NI-MH
1.2V 2000MAH - AA 4 PACK
SB-2931

PANASONIC ENELOOP NI-MH
1.2V 800MAH - AAA 2 PACK
SB-2932

PANASONIC ENELOOP NI-MH
1.2V 800MAH - AAA 4 PACK
SB-2933



↑		Cat.	Qty 1 +	Qty 8 +	Qty 15 +	
	AA 2000mAH	Pack 2	SB-2930	\$15.95	\$14.35	\$12.70
	AA 2000mAH	Pack 4	SB-2931	\$27.95	\$24.95	\$22.35
	AAA 800mAH	Pack 2	SB-2932	\$15.95	\$14.35	\$12.70
	AAA 800mAH	Pack 4	SB-2933	\$27.95	\$24.95	\$22.35

PANASONIC XX HIGH CAPACITY ENELOOP NI-MH 1.2V - 4 PACKS

For even more demanding applications the Panasonic XX High Capacity range are perfect. They provide a massive 2500mAh capacity (AA size), can be recharged 500 times, and will retain 75% of their capacity after a year in storage. They can also be used in sub-zero temperatures (-20°C) without issue. The high capacity allows you to take up to 5x more pictures with your digital camera. These batteries are pre-charged with photovoltaic generation.

900MAH - AAA 4 PACK
SB-2938

2500MAH - AA 4 PACK
SB-2936

SEE PAGE 329 FOR AN ENELOOP BATTERY CHARGER



⬆		Cat.	Qty 1+	Qty 8+	Qty 15+	
	AAA 900mAH	Pack 4	SB-2938	\$29.95	\$26.90	\$23.70
	AA 2500mAH	Pack 4	SB-2936	\$29.95	\$26.90	\$23.70

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MB-3564



BATTERY CHARGERS

P329

FROM
\$34.95
MB-3563



ENELOOP CHARGER

P329

FROM
\$1.95
NS-3008



SOLDER

P172

FROM
\$4.45
HB-6359



BATTERY CONTAINERS

P331

RECHARGEABLE BATTERIES

NI-MH RECHARGEABLE BATTERIES (CONTINUED)

LONG LIFE PRE-CHARGED RECHARGEABLE BATTERIES - 1.2V

Like the Sanyo eneloop batteries, these have all the benefits of disposable batteries, but are rechargeable - they feature ultra-low self-discharge technology so they can be used immediately after purchase. They retain 85% of initial capacity after 1 year of storage, are environmentally friendly and are ideal for the most demanding of modern digital devices.

- 4 packs available. Supplied in a protective storage case.

TECH TALK!

Will stay charged even when stored for long periods



Type	Cat.	Qty 1+	Qty 8+	Qty 15+
Sub C Single - 3000mAh Solder Tags	SB-1759	\$8.95	\$7.95	\$6.95
AA Single - 2000mAh Solder Tags	SB-1751	\$4.95	\$4.45	\$3.90

7.2V 3300MAH NI-MH RC BATTERY

High capacity, high current discharge Ni-MH pack for radio control cars. Fitted with standard "Tamiya" type plug.



Type	Cat.	Qty 1+	Qty 8+	Qty 15+
Sub C 3300mAh	SB-2314	\$49.95	\$44.90	\$39.90

HIGH DISCHARGE 3300MAH NI-MH SUB C BATTERY

Perfect replacement for Ni-Cd batteries in power tools and other battery packs. This high discharge Sub C can discharge at over 40A making it clearly superior to the old Ni-Cd technology, effectively making it obsolete. Supplied fitted with quality solder tabs to make into battery packs either as replacements for Ni-Cd batteries or for new projects.



Type	Cat.	Qty 1+	Qty 8+	Qty 15+
Sub C 3300mAh	SB-1611	\$8.95	\$7.95	\$6.95

NI-CD RECHARGEABLE BATTERIES

NI-CD RECHARGEABLE BATTERY SUB C

Specifications	
Size	SUB C
Current Capacity	1800mAh
Voltage	1.2V
Charging rate standard	180mA for 14-16 hours ¹
Charging rate Fast 4-5 hours ¹	600mA
Terminal type	Solder tabs

Note 1: At 20°C

Note 2: Similar to batteries used in the Braun electric toothbrush (2 required).



Type	Cat.	Qty 1+	Qty 8+	Qty 15+
Sub C 1800mAh	SB-2468	\$6.95	\$6.25	\$5.50

RECHARGEABLE 3V CR123A

Rechargeable CR123A 650mAh battery

- Use charger MB-3581

SEE OUR CHARGER TO SUIT ON PAGE 330



Type	Cat.	Qty 1+	Qty 10+	Qty 20+
CR123A 650mAh	SB-2411	\$13.95	\$12.35	\$10.95

LI-ION RECHARGEABLE BATTERIES

RECHARGEABLE LI-ION BATTERIES

Choose between nipple or solder tabs to make into battery packs for replacement or new projects. Commonly used in LED torches.

14500 750MAH 3.7V NIPPLE

- Dimension: 49(L) x 14(Dia.)mm

SB-2303

14500 800MAH 3.7V SOLDER TAG

- Dimension: 48(L) x 8(Dia.)mm

SB-2300

14500 800MAH 3.7V SOLDER TAG

- Dimension: 48(L) x 8(Dia.)mm

SB-2301

18650 2200MAH 3.7V NIPPLE

- Dimension: 65(L) x 18(Dia.)mm

SB-2308

18650 2600MAH 3.7V NIPPLE

- Dimension: 65(L) x 18(Dia.)mm

SB-2308

18650 2600MAH 3.7V SOLDER TAG

- Dimension: 65(L) x 18(Dia.)mm

SB-2313

26650 3400MAH 3.7V NIPPLE

- Dimension: 68(L) x 21(Dia.)mm

SB-2315

26650 3400MAH 3.7V SOLDER TAG

- Dimension: 68(L) x 21(Dia.)mm

SB-2319



Type	Cat.	Qty 1+	Qty 8+	Qty 15+
14500 750mAh 3.7V Nipple	SB-2303	\$9.95	\$8.75	\$7.75
NEW 14500 800mAh 3.7V Nipple	SB-2300	\$9.95	\$8.95	\$7.95
NEW 14500 800mAh 3.7V Solder	SB-2301	\$10.95	\$9.75	\$8.75
NEW 18650 2200mAh 3.7V Nipple	SB-2403	\$19.95	\$17.70	\$15.70
NEW 18650 2600mAh 3.7V Nipple	SB-2308	\$19.95	\$17.95	\$15.70
NEW 18650 2600mAh 3.7V Solder	SB-2313	\$21.95	\$19.75	\$17.75
NEW 26650 3400mAh 3.7V Nipple	SB-2315	\$24.95	\$22.50	\$19.70
NEW 26650 3400mAh 3.7V Solder	SB-2319	\$25.95	\$23.35	\$20.70

LIFEPO4 RECHARGEABLE BATTERIES

LIFEPO4 RECHARGEABLE BATTERIES

Lithium iron phosphate (LiFePO4) is a more chemically stable type of lithium rechargeable cell that is becoming increasingly popular, due to the increased safety and longer cycle life over traditional Li-ion cells. They have a slightly lower capacity and nominal voltage than equivalent Li-ion cells, but can be charged/discharged around 2000 times (versus 500-1000 for Li-ion), and can deliver higher peak currents. We now offer a couple of common sizes:

14500 3.2V 600MAH LIFEPO4

- Capacity: 600mAh
- Dimensions: 14(diam) x 50(L)mm

SB-2305

18650 3.2V 1600MAH LIFEPO4

- Capacity: 1600mAh
- Dimensions: 18(diam) x 69(L)mm

SB-2307

26650 3.2V 3400MAH LIFEPO4

- Capacity: 3400mAh
- Dimensions: 68(L) x 21(Dia.)mm

Type	Cat.	Qty 1+	Qty 8+	Qty 15+
14500 600mAh	SB-2305	\$9.95	\$8.75	\$7.75
18650 1600mAh	SB-2307	\$17.95	\$15.95	\$14.35
26650 3000mAh NEW	SB-2317	\$24.95	\$22.50	\$19.70



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LI-ION CHARGERS

P330

FROM
\$54.95
MB-3637



LI-PO CHARGER

P330

FROM
\$24.95
MB-3717



LI-ION BATTERY BANKS

P474

FROM
\$34.95
MB-3581



CR123A RECHARGER

P330

BATTERY CHARGER COMPARISON CHART

	MB-3564	MB-3514	MB-3549	MB-3563	MB-3561	MB-3568	MB-3551	MB-3545	MB-3632	MB-3638	MB-3639	MB-3637
12VDC			*		*		*		*		*	*
240VAC	*	*	*	*	*	*	*	*		*	*	*
Alkaline						*						
Ni-MH	*	*	*	*	*	*	*	*	*	*	*	*
Ni-Cd	*	*	*	*	*	*	*	*	*	*	*	*
Li-ion									*	*	*	*
Li-Po									*	*		*
AAA	*	*	*	*	*	*	*	*			*	*
AA	*	*	*	*	*	*	*	*			*	*
C		*						*				
D		*						*				
9V		*					*	*			*	*
USB OUTLETS										*	*	
FAST CHARGE	*				*			*				
DISCHARGES							*					
PAGE NUMBER	329	329	329	329	329	329	329	330	330	330	330	330

AAA & AA CHARGERS

FAST NI-MH/NI-CD BATTERY CHARGER

Suitable for charging 1 to 4 AA or AAA Ni-MH/Ni-Cd rechargeable batteries. Features over-current, over-heat and over-voltage protection with the ability to detect non-rechargeable, short-circuited or defective batteries. Plugs directly into a mains power point.

- 600mA charging current
- Plugs directly into 240VAC mains outlet
- 4 LED indication
- Dimensions: 100(L) x 64(W) x 25(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
MB-3564		\$19.95	\$17.70	\$15.70

UNIVERSAL NI-CD/NI-MH BATTERY CHARGER WITH CUT-OFF

An affordable universal battery charger that will re-charge Ni-MH/Ni-Cd batteries in AA, AAA, C, D as well as 9V. It will also ensure long battery life by cutting-off the voltage when they are fully charged. The unit can charge in various configurations, for example 2 x 9V and 4 x AA batteries simultaneously.

- Recharges: AAA, AA, C, D and 9V batteries
- Cut-off function
- Accepts various combinations of batteries
- Dimensions: 199(L) x 100(W) x 46(H)mm



Batteries must be charged in pairs excluding 9V.



	Cat.	Qty 1+	Qty 2+	Qty 4+
MB-3514		\$24.95	\$22.35	\$19.70

TECH TALK!

Learn more about using and charging Ni-Cd and Ni-MH batteries. Read our primers at www.jaycar.com.au/primers

2 HOUR FAST CHARGER FOR AA/AAA NI-MH BATTERIES

Recharge up to four AA or AAA Ni-MH batteries. This handy charger, which utilises Delta V voltage detection, charges batteries to their optimal level to ensure long life. Charge state can be monitored on the integrated electric blue LCD. Charge on the go with the car cigarette lighter cord included as well as the mains plugpack.

- Easy to read and backlit LCD
- Includes bad cell detection
- Charge at the home, office or on the road
- Delta V detection and cut-off
- 1150mA charging current for AA batteries
- 600mA charging current for AAA batteries
- Supplied with mains plugpack and car charging cable
- Dimensions: 105(L) x 68(W) x 30(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
MB-3549		\$29.95	\$26.90	\$23.70

PANASONIC NI-MH BATTERY CHARGER WITH 4 ENELOOP BATTERIES

Charges both AA and AAA batteries and includes 4 x AA pre-charged Eneloop batteries. Eneloop batteries are ready for action straight from the shelf as they discharge at an extremely low rate. They can be recharged approximately 1,800 times (compared to approx 500 times for a regular rechargeable).

- Plug-in style wall charger (240V)
- Approx. 10 hour charge time
- Includes 4 x AA Eneloop 2,000mAh batteries
- Dimensions: 75(W) x 118(H) x 40(D)mm



Batteries included

	Cat.	Qty 1+	Qty 2+	Qty 4+
MB-3563		\$34.95	\$31.45	\$27.90

60 MINUTE FAST CHARGER WITH USB PORT

Recharge up to 4 x AA or AAA Ni-MH batteries fast with this handy charger. Using Delta -V voltage detection, 4 individual channels and an auto cut-off safety timer. Also features LED indicators that show the charging status for each channel. Loaded with a USB port capable of 2.1A, great for charging digital cameras, GPS, Smartphones, iPhones® or iPads® and tablets. 240VAC adaptor and a 12VDC adaptor.

- Suitable for 1-4 AA or AAA batteries
- Charge current 2000mA for AA, 850mA for AAA
- Dimensions: 114(L) x 75(W) x 30(D)mm



Batteries not included

	Cat.	Qty 1+	Qty 2+	Qty 4+
MB-3561		\$49.95	\$44.90	\$39.90

ALKALINE/NI-CD/NI-MH BATTERY CHARGER

Contrary to popular belief, it is actually possible to recharge alkaline batteries as long as they aren't completely dead. Now you can recharge AA or AAA alkaline batteries 10-20 times depending on their quality, age and condition as well as recharge Ni-Cd or Ni-MH batteries. Recharging 4 x AA top brand name batteries just 10 times will more than pay for the cost of this charger, you will certainly get your money's worth! LEDs indicate charge status and the on-board electronics prevent overheating or overcharging.

- Charges up to 4 x AA or AAA alkaline, Ni-Cd or Ni-MH batteries
- Microprocessor controlled to prevent overcharging
- Individual charge circuits for each cell
- Maximum output current: 350mA (x4)
- Safety timer cutout
- Mains powered
- Dimensions: 71(W) x 118(H) x 30(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
MB-3568		\$59.95	\$53.95	\$47.90

12VDC & 240VAC SMART BATTERY CHARGER NI-CD & NI-MH

Accepts a combination up to 10 x AA or AAA cells and 2 x 9 volt batteries. The integrated discharger can fully flatten the battery before charging to help minimise memory effects. Uses Delta V sensing to achieve the maximum charge. Charging timer protects against overcharging & individual LEDs show battery status.

- Charges up to 10 AA or AAA batteries
- Mains power adaptor supplied
- Dimensions: 220(W) x 40(H) x 115(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
MB-3551		\$59.95	\$53.95	\$47.90

SMALL BATTERY CHARGERS

AAA, AA, C, D, 9V CHARGERS

12VDC & 240VAC BATTERY CHARGER WITH LCD

Recharge up to 4 x AA, AAA, C, D and 2 x 9V Ni-Cd or Ni-MH batteries together for a total of 6 batteries. Using Delta V voltage detection and cut-off, batteries are never overcharged and each managed fully through the charging process with the LCD keeping you informed during the process. Powerful enough to get modern day high capacity Ni-MH batteries charged quick enough and the ability to charge most battery types make this a charger handy for anyone with a lot of rechargeable batteries.

- Easy to read backlit LCD (4 main channels shown)
- LED charging indicator for all 6 batteries
- Delta V detection and cut-off
- 4 charging channels (max 6 batteries charging simultaneously)
- Discharge function for Ni-Cd batteries
- 1000mA charging current for AA, C & D batteries & 500mA for AAA batteries
- 13mA charging current for 9V
- Supplied with mains plug pack only, for in-car operation use PP-1996 power lead



	Cat.	Qty 1+	Qty 2+	Qty 4+
↑	MB-3545	\$59.95	\$53.95	\$47.90

UNIVERSAL PROGRAMMABLE BALANCED BATTERY CHARGER

Particularly suited to radio control hobbies, it charges, discharges and balances Li-Ion, Li-Po, Ni-Cd, Ni-MH and lead-acid batteries. Li-Po batteries are balance-charged so there's no risk of damage or explosion from incorrect charging. The charging cycle is programmable and the whole process, or the charging of each individual cell can be monitored on the LCD screen. It can be powered with a mains plugpack or directly from a 12V battery or any other DC source from 10 - 18 volts. You'll need a fairly beefy mains supply capable of supplying about 5 amps. A variety of adaptors are included - glow plug, alligator clip, 2 and 3 pin battery packs and it also features balance charge connectors on the main housing.

Charging capacity:

- Up to 15 Ni-Cd or Ni-MH cells
- 2, 3, 4, 5 or 6 cell Li-Po packs
- 2 - 20V lead-acid
- Charge current: 0.1-5.0A
- Discharge current: 0.1-1.0A
- Current drain for balancing Li-Po: 300mAh/cell
- Microprocessor controlled
- Delta V charging detection
- 2, 3, 4, 5 and 6 cell balanced charging outputs
- Recommended mains power supply Cat. MP-3243
- Dimensions: 132(L) x 82(W) x 28(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
↑	MB-3632	\$84.95	\$76.50	\$67.95

UNIVERSAL LI-ION CYLINDER BATTERY CHARGER WITH USB

Can accommodate 1 or 2 AA Ni-Cd/Ni-MH batteries or a variety of cylinder shaped Li-ion/Li-Po batteries. It achieves this with an adjustable battery contact. There is also a handy USB port that outputs 2.1A so you can charge your iPad® and Smartphones with ease. Compact size for easy transportation.

Specifications	
Ni-Cd/Ni-MH charging	1.4V 1000mA
Li-Polymer/Li-ion charging	3.7V 1000mA
Suitable for	18650, 14500, 18500, 17670, 17500, 16650, 22650
Dimensions	110(L) x 48(W) x 27(D)mm



Note: Batteries not included



	Cat.	Qty 1+	Qty 2+	Qty 4+
↑	MB-3638	\$29.95	\$26.90	\$23.70

UNIVERSAL LITHIUM CYLINDER BATTERY CHARGER

A universal smart charger with dual independent charging slots for charging Li-ion, Li-Po and LiFePO4 cylinder cells. The adjustable battery contacts means this charger is suitable for the plethora of available lithium cell sizes such as 14500, CR123A and 18650 to name a few. It can also charge Ni-Cd and Ni-MH in AA and AAA sizes as well as 9V. It features an LCD to show the status of capacity, voltage, time and battery condition (poor/fail). It can be powered using the supplied mains power adaptor, 12V cigarette lighter lead, or via USB inputs.

- Suitable Lithium sizes: CR123A, 14500, 16650, 17670, 17500, 18500, 18650, 22650, 26650
- Suitable for AA and AAA Ni-Cd and Ni-MH
- Dimensions: 135(L) x 70(W) x 35(D)mm



Batteries NOT included



	Cat.	Qty 1+	Qty 2+	Qty 4+
↑	MB-3637	\$54.95	\$49.45	\$43.90

RECHARGABLE LI-ION BATTERIES & CHARGERS

UNIVERSAL LI-ION/NI-CD/NI-MH BATTERY CHARGER

This cleverly designed charger to charge various Li-ion battery packs, as well as AA, AAA or 9V Ni-MH and Ni-Cd rechargeable batteries. Housed with a spring loaded cover for clamping down batteries, two Delta-V controlled single cell channel and two adjustable contact pins which are polarity sensing for that added convenience. A USB port on the side accommodates the charging needs for your iPhone®, Smart phone or any USB power device. Topped off with an LCD for displaying the battery type, voltage and charge status. Perfect for digital camera, cordless phone and MP3 player batteries. The charger is supplied with both mains and car adaptors.

- Suitable for: 1 x 3.6V or 7.2V Li-ion batteries packs
1-2 x AA/AAA Ni-MH or Ni-Cd batteries
1 x 9V Ni-MH
- USB output: 5VDC, 500mA
- Dimensions: 120(L) x 62(W) x 35(H)mm



Note: iPhone®, charging cable and batteries not included

	Cat.	Qty 1+	Qty 2+	Qty 4+
↑	MB-3639	\$39.95	\$35.90	\$31.90

LITHIUM ION CR123A BATTERY CHARGER

CR123A batteries are commonly used in some LED torches and many cameras but the replacements are expensive. Now there's a rechargeable option with this lithium-ion CR123A battery & matching charger. Normally, Li-ION batteries have a nominal voltage of 3.7V, which being higher than a normal CR123 battery can damage the sensitive circuitry of LED torches and cameras - but this battery is different! The battery features smart circuitry inside that drops the voltage to 3.0V under load, making it perfectly safe to use with sensitive electronics that normally use a 3.0V CR123 battery. The intelligent design will fully recharge the included battery in about 3 hours and shows an LED charge status indicator.

- Automatic charge control
- Short circuit & over voltage protection
- Supplied with mains plugpack and car charging cable
- Smart battery technology keeps nominal voltage to 3.0V

Replacement CR123A 650mAh battery
Cat. SB-2411 sold separately

NOTE: BATTERY INCLUDED

Specifications	
Battery voltage	3VDC
Charge time	3 hours
Charger input	12VDC
Dimensions	90(L) x 40(W) x 25(H)mm



SB-2411

MB-3581

⬆		Cat.	Qty 1+	Qty 2+	Qty 4+
	CR123A Charger with Battery	MB-3581	\$34.95	\$31.45	\$27.90
⬆		Cat.	Qty 1+	Qty 10+	Qty 20+
	CR123A Battery	SB-2411	\$13.95	\$12.35	\$10.95

UNIVERSAL CHARGER FOR CORDLESS POWER TOOLS (4.8-24V)

Have a cordless power tool and can't find the charger? If it has a Ni-MH or Ni-Cd battery then this charger will solve your problem. It features intelligent non-polarity operation, which automatically detects the polarity and voltage of your battery and charges it accordingly. Just connect the strong magnetic or alligator clip connectors to your battery and this smart charger will do the rest. It incorporates two status LEDs, one indicating that the battery is charging and the other indicates once it is full.

Includes:

- Power adaptor: 100-240VAC to 12VDC 3.0A - 1.5m long cable
- Cigarette plug (for in car use) - 1.5m long cable
- Alligator battery connector lead - 270mm long
- Magnetic battery connector lead - 290mm long

Note: Battery not included



Specifications	
Input Voltage	100-240VAC (power adaptor) or 12VDC (cigarette plug)
Battery Voltage	4.8 / 7.2 / 9.6Volts (@ 1.7A), 12 / 14.4 / 18 Volts (@1.35A), 19.2 / 24 Volts (@ 1.0A)
Charging time	1-3 Hours - depends on battery capacity
Charger base unit	197(L) x 74(W) x 39(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
↑	MB-3631	\$79.95	\$71.95	\$63.95

BATTERY CONTAINERS

4 X AA BATTERY CONTAINER

PACK OF 2

Handy battery containers to store your AA batteries. Perfect for every digital camera owner who should have a spare set of batteries, charged and ready to go. Each container holds up to 4 x AA batteries and measure only 65mm wide, easily fitting in the pocket, purse or camera bag.

- One red and one blue supplied.



Batteries not included

↑ Cat.	Qty 1+	Qty 4+	Qty 10+
HB-6359	\$4.45	\$3.95	\$3.45

BATTERY TESTERS

BATTERY / BULB / FUSE TESTER

Battery tester with fuse and bulb checker. Tests AAA, AA, C, D (1.5V) & 9V batteries on the easy-to-read, colour-coded analogue display. It checks bulbs and fuses, giving a 'good' or 'replace' indication, and will also test larger 1.5V button batteries like the LR-44. There is also a handy compartment to store spare fuses, bulbs and button cells.

- Measures: 150mm long
- Uses 9V Battery (included).



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
QP-2252	\$13.95	\$12.35	\$10.95

ALL IN ONE BATTERY TESTER

Here's a modern day battery tester to suit all your needs. This handy unit will test all types of batteries currently out there on the market including standard AA/AAA/C/D/9V batteries, button cells and lithium batteries such as those used in digital cameras. The LCD indicates the level of capacity so you'll never get caught out on a day trip with 1/2 flat batteries in your digital camera.

- One product to test all those batteries in your kitchen drawer before use!!

Note: Batteries not included



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
QP-2253	\$23.95	\$21.35	\$18.95

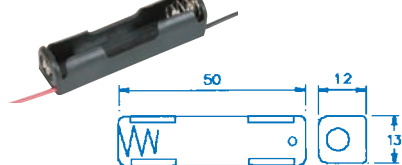
BATTERY HOLDERS

AAA SIZE

The holders are moulded in Delrin with corrosive resistant nickel plated springs and studs.

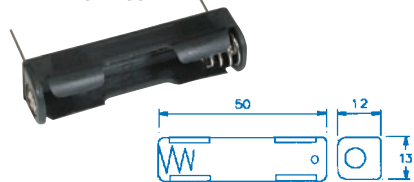
- All have connection wires 150mm long, unless marked
- We can supply OEM quantities of holders with special configurations

1 X AAA



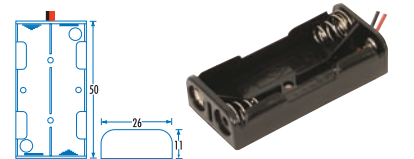
↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9260	\$0.80	\$0.70	\$0.62

1 X AAA PCB MOUNT



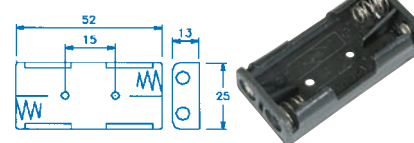
↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9261	\$0.80	\$0.70	\$0.62

2 X AAA CELL



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9226	\$1.45	\$1.30	\$1.15

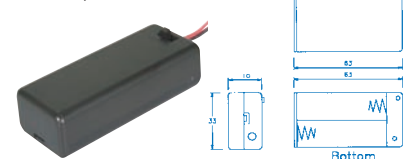
2 X AAA PCB MOUNT



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9264	\$1.00	\$0.90	\$0.80

2 X AAA SWITCHED BATTERY ENCLOSURE

- Size 63(L) x 26(W) x 16(H)mm
- 150mm long tinned leads
- Slide on/off switch



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9288	\$2.45	\$2.15	\$1.95

3 X AAA BATTERY HOLDER FOR LED LIGHTS

Round battery holder that holds 3 x AAA batteries. Suits LED torches and bike lights, including ST-3465, ST-3456 and ST-3475. Have a few handy, loaded with batteries (available separately), if you're going long distance.

- Dimensions: 53.5(L) x 22.3(Dia)mm (without batteries)

↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9221	\$0.95	\$0.85	\$0.75

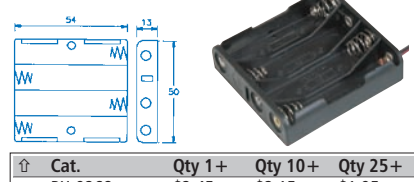
4 X AAA SWITCHED BATTERY ENCLOSURE

- High quality ABS holder with on/off switch and sliding cover
- Includes 150mm long tinned leads
- Dimensions: 63(L) x 48(W) x 15(H)mm



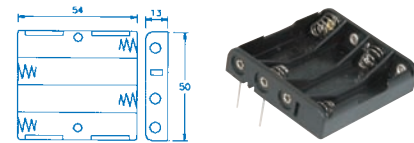
↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9285	\$2.95	\$2.60	\$2.30

4 X AAA SIDE BY SIDE



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9268	\$2.45	\$2.15	\$1.95

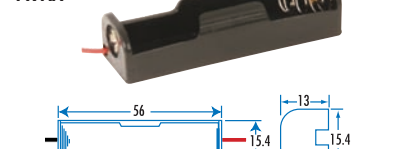
4 X AAA PCB MOUNT



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9270	\$2.45	\$2.15	\$1.95

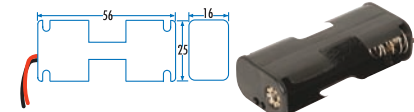
AA SIZE

1 X AA



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9203	\$0.95	\$0.85	\$0.75

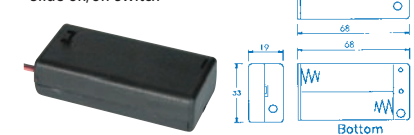
2 X AA SIDE BY SIDE



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9202	\$0.95	\$0.85	\$0.75

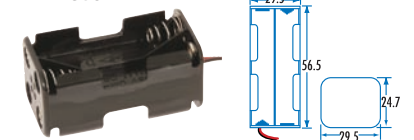
2 X AA SWITCHED BATTERY ENCLOSURE

- Size 68(L) x 33(W) x 19(H)mm
- 150mm long tinned leads
- Slide on/off switch



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9280	\$2.45	\$2.15	\$1.95

4 X AA SQUARE

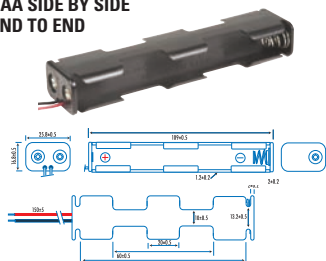


↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9200	\$1.65	\$1.45	\$1.30

SEE OUR RANGE OF ECLIPSE BATTERIES ON PAGE 323.

BATTERY HOLDERS (CONTINUED)

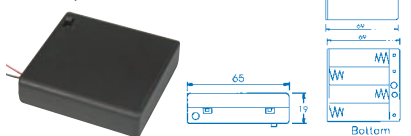
4 X AA SIDE BY SIDE & END TO END



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9204	\$1.65	\$1.45	\$1.30

4 X AA SWITCHED BATTERY ENCLOSURE

- Size 69(L) x 65(W) x 19(H)mm
- 150mm long tinned leads
- Slide on/off switch



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9282	\$2.95	\$2.60	\$2.30

4 X AA WATERPROOF BATTERY ENCLOSURE

Simply add your own AA batteries and you have a 6V power source to power your gadgets when mains power is not available. It is water and dustproof, so it can be used outdoors, which could include powering outdoor weather sensors, tank level meters, door entry buzzers, decorative LED lighting, etc.

- High impact resistant ABS plastic enclosure with a nylon cable gland
- Rated IP68 to provide protection against oil, dust and water
- Enclosure is secured by brass nuts moulded in the interior of the base with 4 x supplied self tapping screws
- Includes 150mm long tinned leads
- Dimensions: 79(L) x 67(W) x 23(H)mm



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9281	\$6.95	\$6.25	\$5.50

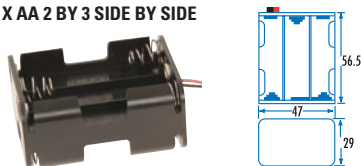
4 X AA SWITCHED BATTERY ENCLOSURE WITH 2.1MM DC PLUG

- High quality ABS holder with on/off switch and sliding cover
- Includes 150mm lead 2.1mm DC Plug (centre positive)
- Dimensions: 68(L) x 65(W) x 19(H)mm



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9283	\$5.95	\$5.50	\$4.75

6 X AA 2 BY 3 SIDE BY SIDE



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9206	\$1.75	\$1.55	\$1.40

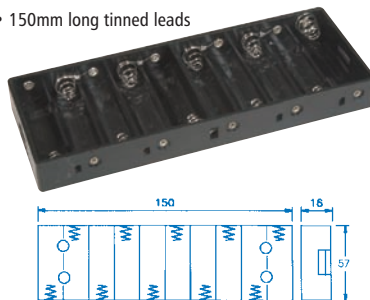
8 X AA 2 ROWS OF 4 SQUARE



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9209	\$1.95	\$1.75	\$1.55

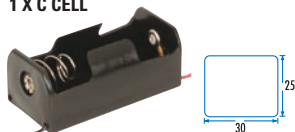
10 X AA SIDE BY SIDE

- 150mm long tinned leads



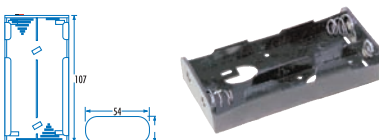
↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9210	\$3.95	\$3.45	\$3.15

C SIZE 1 X C CELL



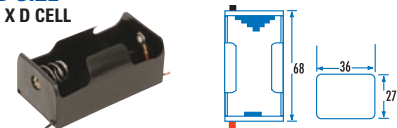
↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9212	\$1.75	\$1.55	\$1.40

4 X C CELL 2 ROWS OF 2 END TO END



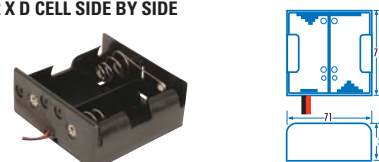
↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9216	\$2.25	\$1.95	\$1.80

D SIZE 1 X D CELL



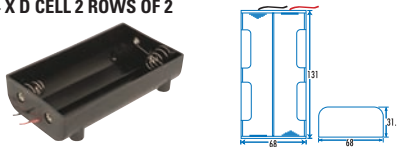
↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9218	\$1.75	\$1.55	\$1.40

2 X D CELL SIDE BY SIDE



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9220	\$2.45	\$2.15	\$1.95

4 X D CELL 2 ROWS OF 2

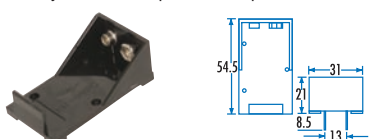


↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9222	\$2.95	\$2.60	\$2.30

9V SIZE

PCB MOUNT 9V

- Plastic holder for 9V batteries
- Battery connection 2 pins 13mm apart.

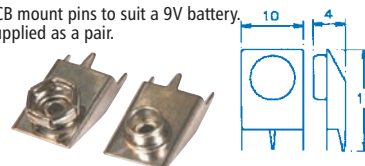


↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9235	\$1.00	\$0.90	\$0.80

9V SIZE (CONTINUED)

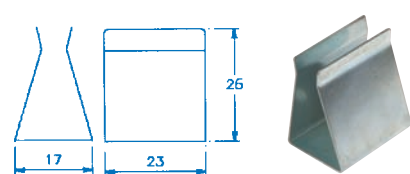
9V PCB X 2 MOUNT CLIPS

PCB mount pins to suit a 9V battery. Supplied as a pair.



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9239	\$1.95	\$1.75	\$1.55

9V HOLDER



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9237	\$0.70	\$0.62	\$0.55

STANDARD 9V SNAP-ON



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9230	\$0.40	\$0.35	\$0.30

QUALITY 9V BATTERY CLIP

If your project or product requires a better than average quality 9V battery clip, look no further, we have them.



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9232	\$0.70	\$0.62	\$0.55

BEST QUALITY "SAFETY" 9V BATTERY CLIP

We call these safety clips because the side of the clip totally covers the battery terminals and sits flush on the top of the battery. Supplied with high quality AWG24 connection cable.



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9233	\$0.90	\$0.80	\$0.70

BEST QUALITY "T" SAFETY 9V BATTERY CLIP

Same as the PH9233 but the wire exits the clip at the side, hence the "T" type.



↑ Cat.	Qty 1+	Qty 10+	Qty 25+
PH-9234	\$0.90	\$0.80	\$0.70

BATTERY BANK 4 X AA WITH USB SOCKET & SWITCH

Provides 5VDC power through the USB socket by using 4 x AA batteries. The unit makes a superb back-up charger for any USB powered device such as an MP3 player or PDA and also features a slide on/off switch.

- Size: 15(H) x 63(W) x 80(D)mm

Batteries not included



Note: Output is not regulated

↑ Cat.	Qty 1+	Qty 10+	Qty 25+
MP-3083	\$6.95	\$6.25	\$5.50

SWITCHMODE AC ADAPTORS

Switchmode AC Adaptors - all of which meet the requirements of the MEPS guidelines and they all feature high levels of efficiency as well as a low standby power consumption, on top of the regular features you have come to expect from our range. The range is compact and has increased the maximum power output of each model - all at the same low price you have always paid.



REGULATED - FIXED VOLTAGE

They are extremely light and compact; enough to snugly and neatly fit side by side on a powerboard - no more wasted AC outlets!

They incorporate high-efficiency circuitry, built in EMI filter, short circuit protection, over current protection and thermal shutdown capability.

Ideal for use with power boards



5 WATT - ULTRA-SLIM

- Input: 100-240VAC 50/60Hz
- Fit side-by-side on a powerboard
- Supplied with 7 plugs
- Safety Approval No. N20276
- Meets MEPS requirements

↑ Voltage VDC	Current Amps	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
5	1	N20276	MP-3144	\$17.95	\$15.95	\$14.35
6	0.8	N20276	MP-3145	\$17.95	\$15.95	\$14.35
9	0.5	N20276	MP-3146	\$17.95	\$15.95	\$14.35
12	0.4	N20276	MP-3147	\$17.95	\$15.95	\$14.35

15 WATT - SLIM HIGH POWER

Regulated output voltage, small size and higher power output make these AC adaptors suitable for thousands of different applications.

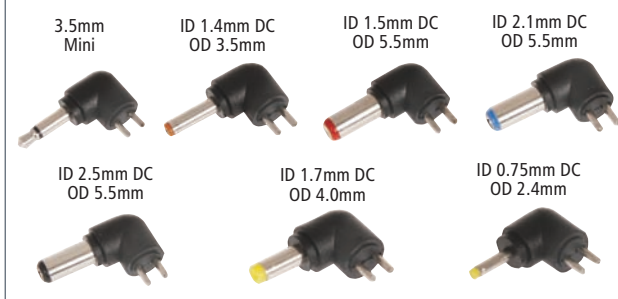
- Input: 100-240VAC 50/60Hz
- Fit side-by-side on a powerboard
- Supplied with 7 plugs
- Safety Approval no. NSW22419
- Meet MEPS requirements



↑ Voltage VDC	Current Amps	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
5	3.0	NSW22419	MP-3480	\$24.95	\$22.35	\$19.70
6	2.2	NSW22419	MP-3482	\$24.95	\$22.35	\$19.70
9	1.7	NSW22419	MP-3484	\$24.95	\$22.35	\$19.70
12	1.5	NSW22419	MP-3486	\$24.95	\$22.35	\$19.70

PLUGS SUPPLIED WITH SWITCHMODE AC ADAPTORS

The 7 plugs supplied with switchmodes are shown here, and are not interchangeable with those on our transformer style range shown on later pages.



25 WATT - EXTRA HIGH POWER

- Input: 100-240VAC 50/60Hz
- Huge output power
- Supplied with 7 plugs
- Safety Approval no. NSW22824
- Meet MEPS requirements



↑ Voltage VDC	Current Amps	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
9	3.0	NSW22824	MP-3496	\$29.95	\$26.90	\$23.70
12	2.5	NSW22824	MP-3490	\$29.95	\$26.90	\$23.70
15	2.0	NSW22824	MP-3492	\$29.95	\$26.90	\$23.70
24	1.25	NSW22824	MP-3494	\$29.95	\$26.90	\$23.70

UNREGULATED - FIXED VOLTAGE

5 WATT - UNREGULATED ULTRA-SLIM

These super-slimline switchmode AC adaptors give an unregulated DC output, meaning that when loaded below their rated power, they will provide a slightly higher output voltage.

- Input: 100-240VAC, 50/60Hz
- Extra small, will fit side-by-side on a powerboard
- Unregulated output voltage
- Direct replacement for old transformer type AC adaptors
- Supplied with 7 DC plugs
- Safety approval no. NSW22823
- Meets MEPS requirements



↑ Voltage VDC	Current Amps	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
9	0.55	NSW22823	MP-3280	\$14.95	\$13.35	\$11.70
12	0.4	NSW22823	MP-3282	\$14.95	\$13.35	\$11.70

MULTI-VOLTAGE

SWITCHMODE PLUGPACKS WITH USB OUTLETS

These switchmode plugpack adaptors are slim in size, lightweight, and feature manually selectable variable voltage outputs. All are MEPS compliant and come supplied with 7 plugs and a USB output socket. (MP-3318 does not include USB socket)

7.2W 3 - 12VDC	MP-3310
Input voltage	100 - 240VAC
Output voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC
Output current	600mA (max)
Dimensions	69(L) x 39(W) x 31(H)mm
12W 3 - 12VDC	MP-3312
Input voltage	100 - 240VAC
Output voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC
Output current	1000mA (max)
Dimensions	75(L) x 44(W) x 44(H)mm
18W 3 - 12VDC	MP-3314
Input voltage	100 - 240VAC
Output voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC
Output current	1500mA (max)
Dimensions	82(L) x 52(W) x 45(H)mm
27W 3 - 12VDC	MP-3316
7 output plugs	
Input voltage	100 - 240VAC
Output voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC
Output current	2250mA (max)
Dimensions	80(L) x 65(W) x 50(H)mm
25W 9 - 24VDC Plugpack	MP-3318
Input voltage	100 - 240VAC
Output voltage	9, 12, 13.5, 15VDC @ 1.5A, 18, 20VDC @ 1.2A, 24VDC @ 1A
Dimensions	96(L) x 50(W) x 30(H)mm

↑ Voltage VDC	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
3 - 12	NSW24400	MP-3310	\$19.95	\$17.70	\$15.70
3 - 12	NSW24401	MP-3312	\$24.95	\$22.35	\$19.70
3 - 12	SAA091002EA	MP-3314	\$29.95	\$26.90	\$23.70
3 - 12	SAA091002EA	MP-3316	\$34.95	\$31.45	\$27.90
9 - 24	SAA091002EA	MP-3318	\$34.95	\$31.45	\$27.90

SWITCHMODE MAINS ADAPTOR 3 - 13.8VDC 2.5A

Variable desktop power supply with binding post and 7 DC plugs. 1.5 metre lead with interchangeable connectors.

Specifications	MP-3308
Output voltage	3, 5, 6, 9, 12, 13.8VDC
Output current	2.5A max
Dimensions	140(L) x 80(W) x 42(H)mm



↑ Voltage VDC	Current Amps	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
13.8	2.5	SGSEA/100289	MP-3308	\$39.95	\$35.90	\$31.90

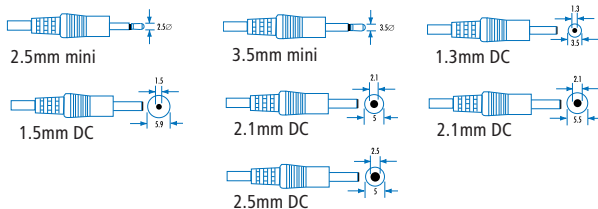
AC ADAPTORS & DESKTOP PLUGPACKS

TRANSFORMER TYPE AC ADAPTORS

Most adaptors are supplied with seven different plugs which suit most applications. All are Electricity Authority (SAA) approved.

PLUGS SUPPLIED WITH ADAPTORS

Reversible so you can have centre pin positive or negative by reversing the plug.



TRANSFORMER TYPE AC ADAPTORS

DC OUTPUT - REGULATED 12VDC 500MA

- CCD Camera Power Supply
- Terminates to a 2.1mm ID / 5.5mm OD DC plug, centre positive.



↑	Voltage(VDC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	12	0.5	NSW22564	MP-3011	\$19.95	\$17.70	\$15.70

AC OUTPUT - NON REGULATED - SINGLE VOLTAGE

- (Regulated AC output in a plugpack is not currently feasible).



NEW LOW PRICE

↑	Voltage(AC) nom	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	9	1.0	N18616	MP-3027	\$24.95	\$22.35	\$19.70
	12	0.5	NSW21379	MP-3020	\$19.95	\$17.70	\$15.70
	12	1.0	NSW23268	MP-3026	\$24.95	\$22.35	\$19.70
	12	2.0	N17582	MP-3057	\$29.95	\$26.90	\$23.70
	15	1.5	N17582	MP-3059	\$29.95	\$26.90	\$23.70
	24*	1.0	N17582	MP-3032	\$24.95	\$22.35	\$19.70

*Stripped and tinned termination

16VAC 1.25 AMP ALARM SUPPLY

Designed for use with many house alarm panels. Supplied with three metres of cable for connection to alarm.

- Size: 55(W) x 90(H) x 60(D)mm.
- Terminated with bare ends.



↑	Voltage(AC)	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	16	1.25	N17582	MP-3021	\$24.95	\$22.35	\$19.70

17VAC 1.25 AMP WITH EARTH CONNECTED

This has the earth pin wire connected. This is used for alarm panels that have an inbuilt dialler, as Austel require earthing due to it being connected to the telephone system.

- Terminated with bare ends.



↑	Voltage(AC) nom	Current(A)	Approval	Cat.	Qty 1+	Qty 5+	Qty 10+
	17	1.25	N17582	MP-3022	\$24.95	\$22.35	\$19.70

AC ADAPTOR PLUGS

PLUGS TO SUIT AC ADAPTORS

Suits all our transformer type 240VAC adaptors shown on page opposite.

- Suits Sony - Blue dot
- 1.7mm ID x 4.0mm OD x 12mm long.

Cat PA-3690.

- 0.7mm ID x 2.35mm OD x 10mm long - Yellow dot

Cat PA-3691.

- 1.75mm ID x 4.75mm OD x 10mm long - Green dot

Cat. PA-3692.



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PA-3690	\$2.95	\$2.60	\$2.30
	PA-3691	\$2.95	\$2.60	\$2.30
	PA-3692	\$2.95	\$2.60	\$2.30

POWER SUPPLY ACCESSORIES

IN-LINE LOW VOLTAGE SWITCH

Simply connect your plug pack adaptor into this in-line switch to provide quick and easy on/off control. Much easier than unplugging the connector or reaching for the power point when you want to switch your device on or off.

- Fitted with 2.1mm DC plug & socket and rated at 24VDC at 2 amps.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SK-0998	\$7.95	\$6.95	\$6.25

7 PLUG DC WIRING KIT - 1.8M

Configure your own plugpacks or wire to projects to give standard DC output plugs. Includes the same socket and 7 DC plugs as supplied with our range of switchmode AC plugpack adaptors.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-1980	\$6.95	\$6.25	\$5.50

DESKTOP STYLE AC ADAPTORS

These products meet the requirements of Energy Star, the European Commission Code of Conduct, and of course California's legislation, suppliers of electronic equipment requiring an external power supply can ship their products worldwide without needing to understand the complex new systems.

GREEN POWER DESKTOP 10W SWITCHMODE ADAPTOR

Electronic equipment suppliers are now having to get green. Legislation is being introduced in California and Europe which requires external power supplies to comply with minimum energy efficiency requirements. It is no longer possible to sell external power supplies which don't comply with these new "Green Power" requirements. With other regulations coming in around the world, it is only a matter of time before these units become the norm.

This 10W 5VDC adaptor is the first in what we expect will become a series of these power supplies. Meeting the requirements of Energy Star, the European Commission Code of Conduct, and of course California's new legislation, suppliers of electronic equipment requiring an external power supply can ship their products worldwide without needing to understand the complex new systems.

Specifications	MP-3236
Input Voltage	100 - 240VAC for worldwide use
Input Current	0.5A RMS Max
Input AC Frequency	47 - 63Hz
Input Connection	IEC320 C8 socket
Output Voltage	5VDC Regulated
Output Current	2A
Output Power Cord	1.8M long terminated with 2.5mm DC plug (centre positive)
Power saving state	Under 0.3W
Size	75.5(L) x 44.5(W) x 26(H)mm
Electrical Safety Approved	Approval Number: V05226



NEW LOW PRICE



↑	Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
	V05226	MP-3236	\$19.95	\$17.70	\$15.70

LET'S FIND EVERYTHING YOU NEED!

FROM
\$7.95
MS-4040



POWERBOARDS

P343

FROM
\$7.95
PS-4122



EXTENSION LEADS

P337

FROM
\$4.95
PP-4035



DOUBLE ADAPTORS

P342

FROM
\$5.95
PS-4115



POWER LEADS

P337

DESKTOP STYLE AC ADAPTORS (CONTINUED)

60W - 12V, 19VDC & 45W 24VDC

Versatile switchmode power supplies in a range of different configurations. All have high output currents and are low-profile for easy mounting.

- Each requires a separate IEC 240VAC lead - Cat PS-4106

- Output cable terminated to fixed 2.5mm DC plug except for MP-3243 which includes 5 output plugs

MP-3242/43 = SAA090025EA
MP-3246/48 = SAA090329EA



↑ Voltage(VDC)	Current(A)	Cat.	Qty 1+	Qty 5+	Qty 10+
12	5	MP-3242	\$59.95	\$53.95	\$47.90
12 (5 plugs)	5	MP-3243	\$64.95	\$58.50	\$51.95
19	3.42	MP-3246	\$59.95	\$53.95	\$47.90
24	2.7	MP-3248	\$59.95	\$53.95	\$47.90

65W - 48VDC

48V power supply specifically designed for power over Ethernet applications.

Specifications	MP-3249
Voltage	90 - 264VAC
Output voltage	48V @ 1.35A
Power output	65W Max.
Over voltage protection	Shutdown latch mode
Over current protection	2 step controlled current source
Short circuit protection	Built-in
Efficiency	85% min. at full load
Ripple/noise (mVpp)	2%

↑ Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
A/12702EA	MP-3249	\$59.95	\$53.95	\$47.90



120W 12VDC 10A DESKTOP STYLE SWITCHMODE POWER SUPPLY

High current switchmode desktop power supply. Suitable for various power requirements, including large surveillance systems to replace a number of smaller plugpacks. DC splitter cables available separately.

- Includes IEC power lead
- Output cable terminated to fixed 2.1mm DC plug

Specifications	MP-3241
Input Voltage	220-240VAC
Output Voltage	12VDC
Output Current	10A
Output Connector	2.1mm DC plug
Output Cable Length	1.2m
Dimensions	174(L) x 72(W) x 44(H)mm

↑ Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
A/1401EA	MP-3241	\$79.95	\$71.95	\$63.95



60W - 12VDC 5A

Specifications	GH-1379
Input	220 - 240VAC
Output	12VDC @ 5 amps
Dimensions	160(L) x 85(W) x 40(H)mm
Input lead lengths	1.2m
Output lead length	1.8m
Termination	2 pin connector

- Green LED power indicator
- Switchmode



↑ Approval Number	Cat.	Qty 1+	Qty 5+	Qty 10+
N20157	GH-1379	\$29.95	\$26.90	\$23.70



FOR FULL RANGE OF REPLACEMENT LAPTOP POWER SUPPLIES SEE PAGE 471 IN OUR COMPUTER SECTION

CHARGERS FOR IPOD®, IPHONE® & IPAD®

USB POWER ADAPTORS

A simple solution to your USB power needs in a conveniently small package. Choose between the 1.0A model to charge mobile phones, MP3 players, cameras and other small USB charged devices, or the 2.1A model that can also charge Tablets and iPads. They also feature worldwide voltage input making them great for travellers. Just connect your USB charging cable (not included) and away you go.

Specifications	
USB	Socket A
Input voltage	100-240VAC, 50/60Hz
Output	MP-3455: 1.0A MP-3449: 2.1A
Dimensions	40(dia) x 27(L)mm

FOR OUR RANGE OF MAINS TRAVEL ADAPTORS SEE PAGE 475



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
1A	MP-3455	\$14.95	\$13.35	\$11.70
2.1A	MP-3449	\$19.95	\$17.95	\$15.70

MAINS CHARGERS WITH USB OUTPUT FOR SMARTPHONES & TABLETS

A range of mains chargers with a USB output port to charge a variety of devices. Great as replacements or as a back-up. Each comes supplied with a 1m USB charge and sync lead to suit your specified device.

MAINS USB CHARGER FOR IPHONE5® WITH LIGHTNING™ CONNECTOR - 2.1A

MP-3540

MAINS USB CHARGER FOR SAMSUNG® GALAXY TABLET - 2.1A

MP-3542

MAINS USB CHARGER FOR SMARTPHONES WITH USB 2.0 MICRO B - 1.0A

MP-3544

MAINS USB CHARGER FOR SMARTPHONES/ TABLETS WITH USB 3.0 MICRO B - 2.1A

MP-3546



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
With Lightning™	MP-3540	\$24.95	\$22.35	\$19.70
With Samsung® Galaxy Tablet	MP-3542	\$19.95	\$17.70	\$15.70
USB 2.0 Micro B - 1.0A	MP-3544	\$17.95	\$15.95	\$14.35
USB 3.0 Micro B - 2.1A NEW	MP-3546	\$24.95	\$22.50	\$19.95

2.4A WALL CHARGER WITH LIGHTNING™ LEAD FOR IPAD®, IPHONE®, IPOD®

Never have charging compatibility issues with your Apple® device with Lightning™ connector again. This 12W (2.4A) mains wall charger is licensed under the Apple® MFi program (made for iPad®, iPhone®, iPod®), so it is fully compatible with all Apple® devices with a Lightning™ connector, even taking into consideration any future iOS® updates and future model releases. The main charger has a single USB output socket, and is supplied with a 1m Lightning™ charge and sync lead which you can also use to sync your device to your home computer.

- Input: 110-240VAC, 50/60Hz
- Output: 5VDC 2.4A
- Lead length: 1m



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
2.4A	MP-3547	\$34.95	\$31.45	\$27.90

FOR MORE SMARTPHONE, IPHONE®, IPOD® & IPAD® CHARGERS & ACCESSORIES SEE PAGES 475 TO 477 IN OUR COMPUTER SECTION



DUAL USB MAINS POWER ADAPTOR - 2 X 2.1A

An ultra fast USB charger complete with 2 x USB sockets with 2.1A each, capable of charging virtually any mobile phone or USB device including all iPad®, iPhone® and iPod® models. Features worldwide voltage input making it great for travellers. Outputs 2100mA for each socket allowing it to charge 2 devices simultaneously. The perfect mobile device charging solution for your home and travel needs.

Specifications	
Input voltage	100-240VAC, 50/60Hz
Output	5VDC, 2.1A + 2.1A (4.2A total)
Dimensions	60(W) x 60(H) x 30(D)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
2 x 2.1A	MP-3459	\$24.95	\$22.35	\$19.70



STEPDOWN & GARDEN LIGHTING TRANSFORMERS

240 - 115V STEPDOWN TRANSFORMERS

TECH TALK!

STEPDOWN TRANSFORMERS

A WORD ON ISOLATION. This means that:

The primary (240V) & secondary (115V) are totally electrically isolated (Dielectric isolation). This is the safest way of making a mains voltage conversion.

We recommend this type of transformer whenever the application is medical or medically related or where the secondary equipment is to be operated in or near water or high moisture environments. Note the 240V earth is carried through to the 115V socket earth. As a further safety measure we now supply the ISOLATED units with resettable circuit breakers.

50 WATT - 240VAC TO 115VAC

Includes overheat protection. If the unit gets too hot, the thermal fuse will open, then close after unit cools down, restoring operation. Two pin US socket on unit for 110V appliance and cord plug for 240V power.

- 50 Watts.
- This is not dielectrically isolated. (auto transformer type)
- Not for use in wet areas



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
50W	MF-1091	\$49.95	\$44.90	\$39.90

ISOLATED STEPDOWN TRANSFORMERS

Quality fully-enclosed stepdown transformer with fold up metal carry handles, approved 3 wire power cord & US style 2 pin 110 - 115V socket.

- Electrically isolated between primary and secondary
- Protective earth carried through to output
- Useable with precision electric & electronic appliances.
- Compact, excellent, safe & robust construction - steel case.
- DO NOT compare these to cheap, non isolated units. Your life is too precious!

Includes a resettable circuit breaker instead of fuse. Now you are not tempted to replace the fuse with a piece of coathanger wire.

120 WATT 240V - 115V ISOLATED

Specifications	
Rating	120VA (watts) 1.0 amp
Size	125(W) x 74(D) x 90(H)mm
Weight	2.4kgs

Cat. MF-1080



250 WATT 240V - 115V ISOLATED

Specifications	
Rating	250VA (watts) 2.2 amps
Size	133(W) x 81(D) x 98(H)mm
Weight	3.2kgs

Cat. MF-1082



500 WATT 240V - 115V ISOLATED

Specifications	
Rating	500VA (watts) 4.2 amps
Size	158(W) x 100(D) x 120(H)mm
Weight	6kgs

Cat. MF-1084



1000 WATT 240V - 115V ISOLATED

Specifications	
Rating	1000VA 8.6 amp
Size	195(L) x 120(W) x 140(H)mm
Weight	11kg

All other details are similar to our other units.

Due to heavy weight (11kgs) please check for freight costs. Cat. MF-1086



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
120W 240 - 115V	MF-1080	\$109.00	\$89.95	\$79.95
250W 240 - 115V	MF-1082	\$149.00	\$133.95	\$118.95
500W 240 - 115V	MF-1084	\$255.00	\$225.00	\$198.95
1000W 240 - 115V	MF-1086	\$419.00	\$375.00	\$335.00

GARDEN LIGHTING TRANSFORMERS

Designed to power 12V and 24V garden lights from mains power. All output voltages are AC, not DC.

240V TO 12VAC 105 WATT - INDOOR

It will power 2 x 50W halogen globes or 5 x 20 watt. Ideal for 5 x 20W pathway lights, for example. Transformer must be used inside.

- 135(L) x 83(W) x 70(H)mm
- Output is via screw terminals
- 4 holes for easy screw mounting

Cat. MP-3043



240V TO 24VAC 150 WATT - INDOOR

All globes must be 24V rated

- Output 6.25 amps

Cat. MP-3045



↑	Approval No.	Cat.	Qty 1+	Qty 5+	Qty 10+
12VAC 105W	N15653	MP-3043	\$39.95	\$35.90	\$31.90
24VAC 150W	N16803	MP-3045	\$59.95	\$53.95	\$47.90

VARIAC

0-260VAC VARIABLE LABORATORY AUTOTRANSFORMER (VARIAC) - 500VA

The variable autotransformer (Variac is the trade name of a popular brand) is one of the most useful and efficient devices ever invented for the control of AC voltage and of voltage-dependent parameters such as current, power, temperature, light intensity, motor speed etc. It enables the AC input to a mains powered appliance to be easily varied from 0 to full line voltage (or greater). Encased in heavy-duty steel housing it also features on/off switch, output-voltage meter, mains-supply lead and standard 3-pin power output. A must for testing appliance performance under real (simulated) mains fluctuations.

NOT DIELECTRICALLY ISOLATED

- New and improved
- Now supplied with slow blow fuses for extra reliability.



Specifications		MP-3080
Rated power handling	500 VA	(fused)
Input Voltage	240 VAC @ 50Hz	
Output Voltage	0 ~ 260 VAC @ 50Hz	
Dimensions	165(D) x 120(W) x 160(H)mm	

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3080	\$229.00	\$209.00	\$182.95

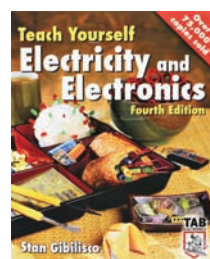


BOOKS

TEACH YOURSELF ELECTRICITY AND ELECTRONICS - FOURTH EDITION

Comprehensive, straightforward and well-written, this book covers everything from atomic structure to DC & AC theory, semi-conductors, integrated circuits, digital electronics & communications. Each chapter has a quiz at the end so you can test your knowledge. One of the best entry-level self-teaching textbooks on electronics we've ever seen.

- Softcover. 734 pages with illustrations
- 232 x 190mm.



↑	Cat.	Qty 1+
	BM-1108	\$59.95

DO A FRIEND A FAVOUR

If you have a technical friend or someone who may be just interested in some of the products we stock, simply mail or email his or her address to:

Catalogue Department
Jaycar Electronics: PO Box 7172
Silverwater, NSW 1811 or email
to catalogue@jaycar.com

MAINS EXTENSION LEADS

MAINS EXTENSION LEADS - WHITE

These leads have the new "safe socket", which has a flange around it, so kids can't slide a knife in and hurt themselves.

- Off white colour



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2 metres	PS-4122	\$7.95	\$7.10	\$6.25
3 metres	PS-4125	\$9.95	\$8.75	\$7.75
5 metres	PS-4130	\$12.95	\$11.35	\$10.35
10 metres	PS-4134	\$19.95	\$17.70	\$15.70

MAINS EXTENSION LEADS - BLACK

Perfect for stage, lighting, DJ or other applications where the inconspicuousness of a black extension lead is required.



- Rated to 10A max.

Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2 metres	PS-4152	\$7.95	\$7.10	\$6.25
5 metres	PS-4155	\$14.95	\$13.35	\$11.70
10 metres	PS-4157	\$19.95	\$17.70	\$15.70

CONNECTION BOXES

DRI-BOX WEATHERPROOF POWER CONNECTIONS BOXES

Protects mains connections from rain, dust, or grime. Just insert a mains plug and socket into the box, connect them, then run the cable out of the openings at each end. The box lid features a rubber gasket and each opening uses a rubbery-jelly material to safely seal the cable from exposure. Ideal for protecting Christmas/other outdoor lighting cables, water features, outdoor speaker cables, outdoor heating equipment, and many other outdoor applications.



Our large model is capable of containing most 4 way powerboards for more demanding outdoor mains requirements. It features 5 openings, one for the mains coming from the powerboard and 4 to be used as outputs from the powerboard.



Two models available:

SMALL - HB-6175

- IP55 rated
- Dimensions: 200(L) x 90(W) x 94(H)mm

LARGE - HB-6177

- IP55 rated
- Dimensions: 285(L) x 150(W) x 110(H)mm

Size	Dimensions	Cat.	Qty 1+	Qty 4+	Qty 10+
Small	200(L) x 90(W) x 94(H)mm	HB-6175	\$19.95	\$17.70	\$15.70
Large	285(L) x 150(W) x 110(H)mm	HB-6177	\$29.95	\$26.90	\$23.70

POWER LEADS

2 PIN POWER LEAD - 1.8M

Black 240V 2 pin power lead as used in many appliances, eg: portable Hi-Fi, shavers etc.

- Universal round IEC C7 connector.
- Not earthed
- SAA Approved



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4115	\$5.95	\$5.25	\$4.75
	Cat.	Qty 1+	Qty 4+	Qty 10+
5.0m	PS-4117	\$11.95	\$10.70	\$9.50

RETRACTABLE 2 PIN POWER LEAD - 1M

Black 240V retractable 2 pin power lead as used in many appliances, eg: portable hi fi, shavers etc. Perfect for travellers or the laptop bag.

- 1m long & SAA approved
- IEC C7 connector

Note: Must be used fully extended



Length	Cat.	Qty 1+
1.0m	PS-4119	\$4.95

CLOVER LEAF

3 pin clover type to 240V plug

- 1.8 metres long
- Earthed
- SAA Approved



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4120	\$6.95	\$6.25	\$5.50

IEC

STRAIGHT IEC FEMALE TO 240V PLUG

- 1.8 metres long.
- Earthed
- SAA Approved



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4106	\$8.95	\$7.95	\$6.95

STRAIGHT IEC FEMALE TO 240V PLUG - 5M

Extra long mains lead (5 metres) to allow more options with equipment placement or for eliminating an extension lead.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5.0m	PS-4105	\$13.95	\$12.35	\$10.95

RIGHT ANGLE IEC FEMALE TO 240V PLUG

- 1.8 metres long
- Earthed
- SAA Approved



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4107	\$9.95	\$8.75	\$7.75

15A IEC C19 FEMALE TO 240V PLUG

- 1.8 metres long
- 15A
- SAA Approved



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4124	\$12.95	\$11.35	\$10.35

IEC MALE TO 3 PIN (GPO) FEMALE

Ideal for connecting a standard powerboard to a UPS etc.

- SAA approved
- 150mm long



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
150mm	PS-4100	\$9.95	\$8.75	\$7.75

IEC FEMALE TO IEC MALE

- 1.8 metres long
- Earthed
- SAA Approved



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4108	\$8.95	\$7.95	\$6.95

240V MALE TO 2 X IEC FEMALE

- Length 2.0 metres.
- Earthed
- SAA Approved
- 540mm before join, each output 1550mm long



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	PS-4102	\$16.95	\$14.95	\$13.35

IEC MALE TO 2 X IEC FEMALE

Generally used for splitting "switched" outputs - like the one on the back of many computers that is used for powering the monitor. Now you can use this facility to turn on another device - like a printer, desk lamp...anything with an IEC male.

- Length 2.0 metres
- SAA Approved



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	PS-4104	\$17.95	\$15.95	\$14.35

CARAVAN POWER

PORTABLE RCD WITH 15A TO 10A MAINS PLUG CONVERSION

Convert your 15A power lead to fit a 10A power outlet whilst adding the additional safety of RCD earth leakage protection. Ideal if you only have a device with a 15A mains plug, and you are located somewhere that does not have a 15A power outlet available. Features a 10A circuit breaker/RCD in case you accidentally overload the device. Not suitable for outdoor use, unless combined with our HB-6178 weatherproof case.

Specifications	MS-4044
Voltage	240VAC, 50Hz
Max load	2400W 10A
Rated residual current	30mA
RCD type	AC & DC pulse sensitivity
Dimensions	180(H) x 135(D) x 124(W)mm
Electrical Safety Approval Certificate No.	SAA122512EA



	Cat.	Qty 1+	Qty 4+	Qty 10+
15A to 10A Mains Adaptor	MS-4044	\$79.95	\$71.95	\$63.95

IP55 WEATHERPROOF BOX FOR MS-4044

This custom made IP55 weatherproof box is made by the good people at DRIBOX®, specifically to suit our MS-4044 Portable RCD with 15A-10A plug conversion. Adding this weatherproof box to your MS-4044 allows you to now take your setup outdoors and on the road with you, and gives full compliance for use with caravans and RVs. A cheap upgrade that is still less than half the price of the only other alternative.



- Dimensions: 250(W) x 250(D) x 190(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
Weatherproof DRIBOX®	HB-6178	\$49.95	\$44.90	\$39.90

WEATHERPROOF (IP55) CARAVAN POWER ADAPTOR WITH RCD

Finally, a product that legally allows you to connect your caravan/RV into a normal domestic power outlet WITHOUT leaving a hole in your hip pocket - no need for unsafe and illegally modified extension leads!! Weatherproof rated to IP55 it is safe to leave outside, and with a residual current device (RCD) safety switch, this product gives you the ability to safely and legally connect your caravan 15A power lead to a normal 10A power outlet. Also includes a 10A circuit breaker in case you accidentally overload the device. A must have for any caravan or RV. Fully certified for electrical safety (AS/NZS 3190) and compliant to Australia Standards for caravan wiring (AS/NZS 3001).



	Cat.	Qty 1+	Qty 4+	Qty 10+
MS-4044 + HB-6178	MS-4048	\$129.00	\$115.95	\$102.95

HEAVY DUTY 15A EXTENSION LEADS

Proper heavy duty mains extensions leads with 15A plugs and sockets, and a thick orange flexible cord. The 15A socket end also features an internal LED to indicate that power is present.



- Perfect for caravans and motorhomes.

	Cat.	Qty 1+	Qty 4+	Qty 10+
10m	PS-4182	\$24.95	\$22.35	\$19.70
15m	PS-4184	\$39.95	\$35.90	\$31.90
20m	PS-4186	\$44.95	\$40.45	\$35.90

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

POWER POINT TESTER

POWER POINT & LEAKAGE TESTER

Test your power points using this versatile tester. It checks most types of power points within 110V to 240V range for correct wiring and trip levels for earth leakage circuit breakers.

The combination of lights on the front panel identifies the following problems:

- No earth connected
- No neutral connected
- No active connected
- Active and neutral reversed
- Active and earth reversed



To determine ELCB trip levels simply slide the switch from 10mA up toward 100mA. All ELCBs should trip before 100mA. Switch positions are 10mA, 15mA, 30mA and 100mA.

	Cat.	Qty 1+	Qty 3+	Qty 6+
240V	QP-2000	\$19.95	\$17.70	\$15.70

FOR OTHER VOLTAGE TESTERS SEE PAGE 232

NON-CONTACT AC VOLTAGE PROXIMITY DETECTOR

About the size of a marking pen, this non-contact tester detects AC voltages from 200 - 1000V. Featuring red and green indicators, the unit will glow green when safe, and when voltage is detected it will flash red and beep at an increasing rate as you get closer to the voltage source. It can be used for detecting live mains in outlets, power boards or insulated wiring. It also has an LED torch and a handy pocket clip. A must for every toolbox.



- Green and Red LED indicators
- Switchable audible and silent mode
- Auto Power Off
- Flashlight function
- CAT III rated
- Includes 2 x AAA batteries
- Dimensions 176(L) x 26(D)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2268	\$19.95	\$17.70	\$15.70

MAINS HARDWARE - GPO SWITCHES

DOUBLE GPO WITH 2 X USB CHARGING PORTS

Minimise the amount of power boards, cable mess, USB power adaptors and chargers connected around the house by fitting these handy GPOs instead. These devices have everything you expect from a standard double power point (GPO), but have the additional bonus of including two USB charging ports each capable of 2.1A output current. The USB ports area also fitted with spring loaded dust covers, ensuring that they don't fill up with dust bunnies when not in use. Perfect for fast charging your Android® devices, iPad®, iPhone®, iPod®, GPS navigation devices, cameras, or other USB charging products, whilst keeping the 240VAC power point free for other mains appliances. A must have for the home office, kitchen, and bedroom.



- 2 x regular 240VAC 10A power points
- 2 x 2.1A USB charge ports (compatible with Apple® devices and Tablet friendly)
- No special wiring, direct replacements to the standard Australian double power point.
- Electrical safety authority approved
- Zero standby power ensures that you are energy efficient
- White colour



	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4067	\$34.95	\$31.45	\$27.90

DOUBLE GPO WITH 2- POLE SWITCHES FOR CARAVANS & MOTORHOMES

By law, caravans, motorhomes and other recreational vehicles require a GPO with double pole switch that disconnects both the Active and Neutral to reduce the chance of electric shock.

- 240V 10A rated
- Includes mounting screws
- Safety approval number: V110160



	Cat.	Qty 1+	Qty 4+	Qty 10+
Approval No. V110160	PS-4069	\$19.95	\$17.70	\$15.70

MAINS HARDWARE (CONTINUED)

MAINS POWER SWITCHES & GPOS

Tradies pay attention!! Finally, there is a discount alternative to the big brand names! Despite being made in China, this range of general purpose outlets (GPOs) & light switches are all made with the highest quality materials and feature an attractive finish you would be happy to show inside your home. The switches are the same hardware long service life type you'll find in the big brand names, and best of all - the price is lower. The savings really start to add up when wiring up the garage or a whole house. They are all fully approved to Australia/New Zealand safety standards, so you don't have to take only our word to ensure quality.

MAINS LIGHT SWITCHES

Standard GPO size light switch.
240V 10A rated.

- Safety Approval No. V07149



	Approval	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
Single Switch	V07149	PS-4055	\$4.95	\$4.45	\$3.90
Double Switch	V07149	PS-4057	\$5.95	\$5.25	\$4.75

GENERAL PURPOSE OUTLETS - GPOs

Tradies pay attention!! Finally, there is a discount alternative to the big brand names! Despite being made in China, this range of general purpose outlets (GPOs) are all made with the highest quality materials and feature an attractive finish you would be happy to show inside your home. The switches are the same hard wearing long service life type you'll find in the big brand names and best of all - the price is lower. The savings really start to add up when wiring up the garage or a whole house. They are all fully approved to Australia/New Zealand safety standards, so you don't have to take only our word to ensure quality.

- Safety Approval No.: V07296
- Packaged in a handy trade-style polybag

Three different types available:

- PS-4040 Single 240V GPO
- PS-4060 Double 240V GPO
- PS-4046 Double 240V GPO with Extra Switch



Note: the screws included with these have a slightly different pitch to the standard 3.5 x 0.8mm, but should still fit plasterboard mounting plates etc.

	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
Single GPO	PS-4040	\$4.95	\$4.45	\$3.90
Double GPO	PS-4060	\$6.95	\$6.25	\$5.50
Double GPO with extra switch	PS-4046	\$7.95	\$6.95	\$6.25

POWER LEAD 3 PIN

- Latest models with insulated pins
- 3 Pin 240V AC plug with 2 metres of 3 core cable to bare ends with lug on earth. 7.5A.



	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	PS-4110	\$5.95	\$5.25	\$4.75

240V LINE PLUG 10A

- Safety clear plastic cover.
- Latest models with insulated pins



	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
	PP-4000	\$3.95	\$3.45	\$3.15

SIDE ENTRY LINE PLUG 240V

- Latest models with insulated pins



	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
	PP-4001	\$4.95	\$4.45	\$3.90

240V MAINS LINE SOCKET

- Safety type.



	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
	PS-4008	\$7.95	\$6.95	\$6.25

240VAC SINGLE ARCHITRAVE LIGHT SWITCH

Single architrave light switch suited for door frames.

- 10A 2-Way switch
- Narrow profile for architrave mounting
- White colour



NEW
2015



	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	PS-4051	\$3.95	\$3.45	\$3.15

MAINS SURFACE SOCKET

3 pin mains socket, where there is plenty of external room. No need to cut large hole in panel - only for wiring.



	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
	PS-4092	\$7.95	\$6.95	\$6.25

MAINS PANEL SOCKETS WITH COVER

Mains panel socket with spring loaded cover
• Approval no: Q090091

10A 250VAC

- Dimensions: 50(H) x 50(W) x 27.6(D)mm

PS-4095

15A 250VAC

- Dimensions: 62(H) x 50(W) x 27.7(D)mm

PS-4097



NEW
LOW PRICE

	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
10A	PS-4095	\$4.95	\$4.45	\$3.90
15A	PS-4097	\$4.95	\$4.45	\$3.90

240V 32A "BP" MAINS CONNECTORS

Available as a pack of 10 standard single screw connectors and 2 double screw. Ideal for safe, reliable earth connections.

"BP" style connectors, also known as acorns. (Double screw are for earth).

- 8 single and 2 double per pack



	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
Pkt 10	HM-3192	\$9.95	\$8.75	\$7.75

JUNCTION BOX

Size 70 x 70 x 37(D)mm.



	Cat.	Qty 1 +	Qty 10 +	Qty 50 +
	PS-4066	\$6.95	\$6.25	\$5.75

BUSBARS

MACHINED BRASS BUSBAR - 8 WAY



DO NOT USE FOR 240V

These are usually used to give an electrically common point for earth wiring but are also useful for low voltage tie points, especially on boats or RV's, Caravans etc., 6 holes accept up to a 4.5mm wire bundle and the outer 2 a 6.0 bundle. The Busbar has insulated standoffs at each end which can be removed so that the assembly can be screwed directly to a chassis. The standoffs have a conservative insulation rating of 1000V.

- All screws M4.0 Brass bar 9.0 x 6.0
- Length overall including standoffs: 100mm, without standoffs: 65mm.

	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	SZ-2003	\$6.95	\$6.25	\$5.50

150A INSULATED BUS BAR

This quality bus bar features a raised insulating base that isolates the bus bar from earthed or other live chassis. It features 2 x 5mm bolted terminals for connecting main power feeds, and 10 screw terminals for connecting lower current feeds of up to 10A each. Total current capacity is 150A, and is suitable for 12-32V wiring. 2 countersunk screw holes for 5mm metric fasteners.

- Not suitable for 240V active circuit
- Dimensions: 145(L) x 30(W) x 40(H)mm



	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	SZ-2012	\$14.95	\$13.35	\$11.70

TRAVEL ADAPTORS

Note: These adaptors do not convert voltage. Item being connected must be suitable for 220-240VAC

UNIVERSAL TRAVEL ADAPTOR WITH USB CHARGER, OVERSEAS TO AUSTRALIA

Suitable for plugging overseas appliances into Australia/New Zealand power sockets. Also provides a USB charging port with 2.1A current to charge your Tablet or Smartphone, eliminating the need to carry multiple power adaptors.



Note: Does not convert voltage.

- Suitable for 240V 50Hz mains.

↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4040	\$19.95	\$17.70	\$15.70

MAINS SURGE PROTECTED TRAVEL ADAPTOR - SOUTH AFRICA/UK/USA/EU TO AUSTRALIA PLUG

Converts a variety of countries devices to Australian mains plug including South Africa, UK, USA and EA. Great if you've purchased appliances overseas and need to connect to your Australian mains plug. Fully surge protected for that added peace of mind.



- Dimensions: 72(L) x 65(W) x 41(D)mm

Important note: This device does not convert voltage. Please ensure your appliances will run on 230VAC.

↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4017	\$9.95	\$8.75	\$7.75

EARTHED ADAPTOR FOR USE IN AUSTRALIA & NZ WITH SURGE PROTECTION

Accepts overseas 2 and 3 pin plugs and adapts to Australia and New Zealand. For use with electrical appliances from Europe, USA, and some Asian and South American countries. Surge protected to provide additional safety.



- Electricity Authority approved (Approval No. NSW21047)

↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4018	\$9.95	\$8.75	\$7.75

EARTHED ADAPTOR FOR USE IN AUSTRALIA & NZ WITH SURGE PROTECTION

Accepts overseas 2 and 3 pin plugs and adapts to Australia and New Zealand plug configuration. This unit includes a surge protector to keep your device safe from voltage spikes. For electrical appliances from many countries including USA, Asia, Japan etc.



- Does not convert voltage.
- Electricity Authority Approved. (Approval No. NSW21046)

↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4019	\$9.95	\$8.75	\$7.75

MAINS TRAVEL ADAPTORS WITH USB CHARGING PORT

Suitable for taking your Australia/New Zealand appliances on your overseas travels. Each provides a USB charging port with 2.1A current to charge your Tablet or Smartphone, eliminating the need to carry multiple power adaptors.

- 4 versions available to suit most countries.
- NOTE: Does not convert voltage.

AUSTRALIA TO EUROPE

Suitable for taking your Australia/New Zealand appliances overseas to plug into Europlug power sockets.



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4042	\$17.95	\$15.95	\$14.35

AUSTRALIA TO UK/HONG KONG

Suitable for taking your Australia/New Zealand appliances overseas to plug into UK/Hong Kong power sockets.



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4044	\$17.95	\$15.95	\$14.35

MAINS ADAPTOR UNEARTHED FOR USA OR JAPAN

This travel adaptor is designed for use on 2 pin Australian appliances while travelling in Japan or the USA.

Only suitable for items without an earth pin such as most mobile phone chargers and laptop power supplies.



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4026	\$9.95	\$8.75	\$7.75

EARTHED MAINS ADAPTOR FOR USE IN AUSTRALIA & NEW ZEALAND

This universal adaptor converts 3 pin plugs from USA or UK to match 3 pin outlets in Australian and New Zealand. Also compatible with the unearthed 2 pin Europlug common throughout Europe. As the adaptor



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4027	\$9.95	\$8.75	\$7.75

EUROPE/USA/JAPAN MAINS TRAVEL ADAPTOR

For use by visitors from all over the world (except South Africa & India).



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4020	\$12.95	\$11.35	\$10.35

AUSTRALIA 3PIN TO USA

Suitable for taking your Australia/New Zealand appliances overseas to plug into 3pin earthed USA power sockets.



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4046	\$17.95	\$15.95	\$14.35

AUSTRALIA 2 PIN TO JAPAN

Suitable for taking your 2pin Australia/New Zealand appliances overseas to plug into 2pin un-earthed Japan/USA power sockets.



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4048	\$17.95	\$15.95	\$14.35

MAINS ADAPTORS FOR AUSTRALIA & NZ GOING OVERSEAS

They DO NOT convert voltage, but allow you to plug into various types of wall outlets around the world.

USA

Approval Number: N19890



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4025	\$9.95	\$8.75	\$7.75

EUROPE

Approval Number: N19887



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4023	\$9.95	\$8.75	\$7.75

GREAT BRITAIN

Approval Number: N19893



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4024	\$9.95	\$8.75	\$7.75

INDIA/SOUTH AFRICA MAINS TRAVEL ADAPTOR

Electrical appliance adaptors for Australians travelling overseas to India or South Africa. Note: DOES NOT convert voltage.



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PP-4028	\$9.95	\$8.75	\$7.75

WARNING!

We strongly recommend that you exercise extreme caution if buying 240V mains accessories from so-called "S2 shops". There have been stories in the News recently where people have been electrocuted from products purchased at these establishments. It appears that they are imported from overseas (usually China) and are not subjected to a rigorous inspection/approval process before being offered for sale.

The 240V products offered from us are all electrically tested and approved where appropriate.

Why risk the lives of yourself and loved ones by using potentially dangerous goods which are not that much cheaper than products from reputable suppliers?

FOR STEPDOWN TRANSFORMERS SEE PAGE 336

MAINS DOUBLE ADAPTORS

MAINS DOUBLE ADAPTORS

- 240V Double Adaptors
- Standard, right & left types



↑	Approval Number	Cat.	Qty 1 +	Qty 4 +	Qty 10 +	
	Standard	N14532	PP-4032	\$4.95	\$4.45	\$3.90
	Right Hand	N19006	PP-4035	\$4.95	\$4.45	\$3.90
	Left Hand	N19006	PP-4036	\$4.95	\$4.45	\$3.90

DOUBLE ADAPTOR WITH NIGHT LIGHT

Leave a night light on for the kids without wasting a power point. When the lights go out, the light comes on so you can find your way to the little room or the kitchen for a midnight snack and it only uses a tiny 0.2W so it won't send the power bill through the roof. It can be left in place and you still have use of the power outlet.

- Light-sensitive
- Size: 88(H) x 44(W) x 33(D)mm



↑	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
	SAA101507EA	PP-4039	\$9.95	\$8.75	\$7.75

MAINS ADAPTORS WITH SURGE PROTECTION

MAINS SURGE PROTECTOR

Mains surge protectors are a must for protecting valuable equipment against damage. Unknown to the majority of consumers, the voltage coming out of the power point can and will fluctuate daily, even without major occurrences like lightning strikes. These two mains surge protectors alleviate the majority of problems caused by these increases in voltage which damage delicate and expensive appliances connected to your power outlets.

Each model has protection across active-neutral and active-earth and is fully approved for electrical safety. Providing adequate protection against most surges in mains voltages, they can save you many times the cost of these units in repairs or insurance claims.

Specifications	MS-4015
Load rating	240VAC 50Hz 10A
Energy absorption	175J
Surge current	6000A

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Double Power Point	MS-4015	\$10.95	\$9.75	\$8.75



PLUG-IN SURGE PROTECTOR WITH 2 X USB CHARGING PORTS, 3.5A

Protecting your mains powered appliances from voltage spikes and surges is cheap insurance against ending up with an expensive paperwork. These surge protectors offer surge protection for the mains outlet(s), whilst also providing two USB charging ports capable of 3.5A total current and universal charging compatibility with all the major phones and tablets on the market. This universal compatibility circuitry allows the connected device to charge at the full rate, rather than at a much slower charge rate or not at all. Available in single or double adaptor type.

Energy absorption: 525J
Protection mode: A-N, N-E, E-A
Max surge current: 1800A
Clamping voltage: 710V
Response time: < 1ns
EMI/RFI noise filter: 150kHz-100MHz
Max USB output current: 3.5A (shared on both ports)

Dimensions:
- MS-4085: 55(W) x 92(H) x 45(D)mm
- MS-4087: 91(W) x 72(H) x 55(D)mm



↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
Single + 2 USB	MS-4085	\$24.95	\$22.50	\$19.95
Double + 2 USB	MS-4087	\$29.95	\$26.95	\$23.70

SURGE PROTECTED MAINS DOUBLE ADAPTOR WITH 2 X USB PORTS

Provides 2 x mains sockets and 2 x USB sockets for recharging all manner of Smartphones and USB powered gadgets. Features a green grounded LED and red protected LED. Surge protected so you don't fry your valuable gadgets in the case of any power spikes.

Specifications	PP-4037
USB socket output	5V at 1A
Dimensions	91(W) x 72(W) x 55(D)mm
Voltage	230-240VAC
Max current	10A
Max Power	2400W
Max energy	525J
Max spike current	18000A
Noise filter	150kHz-100MHz
Output Voltage	5VDC
Out Current	1A
Output Power	5W



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Double + 2 USB	PP-4037	\$15.95	\$14.35	\$12.70

NEW
LOW
PRICE



DETACHABLE WALL PLATE DOUBLE ADAPTOR WITH 2 USB PORTS

A detachable wall plate adaptor that can be easily fixed to an existing power outlet without opening and rewiring which adds 2 x USB ports. The 2 x USB outlets can charge and power your USB devices up to 3.1A in total. Using these two USB ports, you can turn any wall outlet into a mobile device charging station. This smart unit is embedded with surge protection, switchable light sensor night light and emergency light. It suits widely used wallplates such as Clipsal, HPM, etc. Perfect for the kitchen, bathroom, or garage.

- 2 x USB outlets
- 2 x Mains power outlets
- Emergency light in white light
- Light control night light in blue light



Specifications	MS-4009
Voltage	230-240V
Frequency	50/60Hz
Current	10A (Max.)
Power Rating	2400 Watt (max.)
Protection Mode	Fuse & MOV Protected
USB Outlets	5V, 3.1A (total)
Dimensions	134(L) x 95(W) x 38(D)mm (excluding pins)

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Double + 2 USB	MS-4009	\$39.95	\$35.90	\$31.90

NEW
2015



NIGHT LIGHTS

LED NIGHT LIGHT WITH SENSOR

No need to trip over the cat or stub your toe when you need to get up in the middle of the night. Keep one of these plugged in and it will give you enough light to see where you're going. Being LED, it uses very little power, so you can leave it on permanently. The built-in sensor turns the light off whenever the room lights are switched on.

- Ideal for kids room, hallways and closets
- Rotates through 360° to light any direction
- No batteries required
- Durable construction
- Unobtrusive size - smaller than a double adaptor
- Dimensions: 50(Dia) x 50(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
240VAC	ST-3181	\$9.95	\$8.75	\$7.75

MAINS NIGHT LIGHT WITH TORCH

A beautifully designed night light that plugs into a power point and will automatically illuminate a dark hallway, stairway or any room when motion is detected. It has a built-in low light sensor so that it is only activated at night or during low light conditions. The torch sits in an induction charge base and can be easily removed for use during power outages.

Specifications	ST-3146
Power	110-240VAC
Built-in battery	2 x 2450 3.7V 120mAh Li-ion
15 x LED Night Light / 5 x LED Torch	
Charging time	8 hours
Burn time	15LED: > 1h / 5LED: > 5h
Sensor distance	2-3m
Sensor angle	60°
Dimensions	170(H) x 75(D) x 54(W)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
240VAC	ST-3146	\$24.95	\$22.35	\$19.70

NEW
2015



POWERBOARDS

4 & 6 WAY POWERBOARDS

These powerboards will allow 4 or 6 appliances to be plugged in at once to a single power point.



- Maximum load is 2400 watts.
- Includes a safety overload with reset switch.
- White in colour.
- Cord length 1.2 metre.
- Power LED indicator

POWERTECH

4 or 6 way available



↑	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
4 Way	V03474	MS-4040	\$7.95	\$7.10	\$6.25
6 Way	V03474	MS-4045	\$9.95	\$8.75	\$7.75

POWERBOARDS - FILTER / SURGE & OVERLOAD PROTECTION

These powerboards offer a choice of 4 or 6 outlets, all filtered and surge protected. Guard your expensive Hi-Fi, TV, or VCR etc. against damage.

**POWERTECH**

- Surge and spike protected mains outlets
- 10 Amp resettable overload circuit breaker
- Cable length: 1 metre
- Colour: White

Specifications	
Surge Protection	Metal Oxide Varistors
Supply Voltage	230-240VAC
Current rating	10A max
Energy Absorption	230 Joules

4 or 6 way available

↑	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
4 Way	V03045	MS-4051	\$10.95	\$9.75	\$8.75
6 Way	V03045	MS-4055	\$14.95	\$13.35	\$12.70

4 WAY POWERBOARDS - FILTER / SURGE & OVERLOAD PROTECTION

This powerboard offers 4 outlets, all filtered and surge protected. Guard your expensive Hi-Fi, TV, or VCR etc. against damage.

Specifications	
Surge Protection	Metal oxide varistors
Supply Voltage	230-240VAC
Current Rating	10A max
Protection Mode	Active - Neutral
Max Surge Current	6000A
Typical Capacitance	430pF
Clamping Voltage	<775 @ 50A
Energy Absorption	175 joules
Approvals Number	N17298

- 4 Surge and Spike protected mains outlets
- 10 amp resettable overload circuit breaker
- Power on indicator in switch
- Cable length: 1 metre

Available in black or white

↑	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
4 Way	White	NSW17298	\$15.95	\$14.35	\$12.70
4 Way	Black	MS-4057	\$15.95	\$14.35	\$12.70

6 WAY USB POWERBOARD

Charges up to 6 USB devices at a time and features a smart charging IC, which identifies the USB device connected and delivers the most suitable current for that device. It is compatible with numerous digital devices such as the most popular brands of MP3/MP4 players, portable gaming devices, digital cameras, Tablets, and Smartphones, including iPad®, iPhone®, and iPod® and Samsung®.

- Mains powered
- Power LED indicator

Specifications	MS-4068
Current Output	6.8A (Max)
	2 x 2.4A ports, 2 x 1A ports or 4 x 1.2A ports, 2 x 1A
Dimensions	190(L) x 40(W) x 32(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
6 Way	MS-4068	\$39.95	\$35.90	\$31.90

4 & 6 WAY POWERBOARDS - SURGE/OVERLOAD PROTECTED

Individually switched powerboards provide a high level of protection from overload and surge, with extra-wide spacing to take bulky mains plugpacks. Ideal for home theatre, computers, TV and video or audio systems.



- Extra-wide spacing to take mains plugpacks
- Individually switched
- Surge and overload protected

Specifications - Power Filter	
Surge protection	Metal oxide varistors
Supply voltage	230-240VAC
Current rating	10A max
Surge Rating	375 Joule

POWERTECH

4 or 6 way available



↑	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
4 Way	SGSEA090140	MS-4064	\$19.95	\$17.70	\$16.70
6 Way	SGSEA090140	MS-4066	\$24.95	\$22.35	\$20.95

4 WAY POWERBOARD WITH 2 X 2.1A USB CHARGING PORTS

This powerboard with overload protection for the home or office features two handy USB ports which provide 2.1A each for fast charging or powering your iPad®, iPhone, iPod or other power hungry USB devices.

NEW 2015



Specifications	MS-4073
USB ports	5V 2.1A max
Current	10A (max)
Maximum load	2400W
Surge current	6,000A
Clamping voltage	<775V
Energy Absorption	175J
Response time	<2 nanoseconds
Power cord length	1.2m
Dimensions	310(L) x 55(W) x 30(D)mm

POWERTECH

↑	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
4 Way	NSW24083	MS-4073	\$24.95	\$22.35	\$19.70

**POWERTECH**

NEW 2015



POWERBOARDS

POWERBOARDS (CONTINUED)

6 WAY POWER OUTLET WITH MAINS FILTER & TELEPHONE LINE PROTECTION

This mains filter has protection for mains and telephone products: phones, modems, answering machines, cordless telephones, faxes.

- Ideal for protecting your computer and phone line from spikes and surges.
- 6 surge and spike protected mains outlets
- Telephone / data line surge and spike protection RJ45 sockets (RJ12 reducer included)
- 10 amp resettable overload circuit breaker
- Flame retardant enclosure available in Black
- Protection LED indicator & earth connection LED indicator



POWERTECH

Specifications - Power Filter	
Surge protection	Metal oxide varistors
Supply voltage	230-240VAC
Current rating	10A max
Protection mode	PN, NE, PE
Max surge current	30,000A
Typical capacitance	400pF
Clamping voltage	<775V(@50A)
Energy absorption	875 joules
Response time	<20µSec

Specifications - Telephone Data Filter	
Filter type	Gas tube arrestor
Max impulse breakdown voltage	1,000V
Max impulse discharge current	10,000A
Maximum capacitance	20pF



Qty	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
6 way	N18812	MS-4037	\$29.95	\$26.90	\$23.70

5 WAY REMOTE CONTROLLED POWERBOARD

Powerboards often sit in hard to reach places so they're usually hard to turn off in order to reduce wasteful power consumption from devices in standby mode. There are 4 switched sockets for general electrical appliances and 1 socket designed for appliances that always stay on such as telephones, modems, or medical equipment. With the remote control, devices connected to the 4 switched sockets can be switched off/on individually or all 4 can be switched off simultaneously. LED status indicators sit above each socket and the board features a manual switch in the event your remote goes walkabout. The remote is uniquely coded to avoid interference with other remotes.

Powerboard Specifications	
Rated Voltage	240VAC 50Hz
Total Load	10A 2400W
Overload Protection	10A resettable
Surge protection	30,000A 1050 Joules
Standby power consumption	<0.5W
Cord length	900mm
Dimensions	387(L) x 65(W) x 30(D)mm
Remote specifications	
Transmission frequency	433.92MHz
Includes	1 x CR2032 battery
Dimensions	97(L) x 39(W) x 15(D)mm



Qty	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
5 Way	SAA120855EA	MS-6154	\$69.95	\$62.95	\$55.95

6 WAY ENERGY SAVING POWERBOARDS

Energy saving made simple. These auto powerboards help save you money by ensuring your equipment is not left on unintentionally or in standby mode wasting energy and money. To operate, simply connect your main device (eg. TV or PC) into the control socket, plug the pieces of equipment you wish to turn off automatically into the 'auto' sockets and equipment you wish to leave on into the 'always on socket' (eg. DVR for scheduled recording). Once the powerboard senses that the main device has turned off or gone into stand-by the 'auto' sockets will turn off. Once the control device turns back on, so will the 'auto' sockets. The MS-4080 model also features an auto power-down feature where the 'auto' sockets turn off after 60 minutes. If no IR signal is detected from the IR sensor that you place under or in front of the TV within 55 minutes an LED will indicate that it will shut-down in 5 minutes time. To prevent shut down simply press any button on your remote control (eg. volume) or press the button on top of the IR sensor.

- 1 Control socket, 4 auto on/off sockets, 1 always on socket
- Automatically turns off your peripheral equipment
- Power on indicator light + board activated light
- LED Surge protection function indicator light
- IR sensor with 5 minute power down warning light (MS-4080 only)

Specifications	
Power rating	MS-4080/MS-4081
Maximum load	240VAC, 10A
Surge protection	2400W
Clamping Voltage	700 joules
Response time	775V
EMI/RF noise filtration	1ns
Power & IR cord (MS-4080) lengths	40dB
Dimensions	1.8m
	340(L) x 120(W) x 35(D)mm



Note: Remote control not included



Qty	Approval Number	Cat.	Qty 1+
6 Way Energy Saving Powerboard with IR Sensor for AV	SAA120508EA	MS-4080	\$39.95
6 Way Energy Saving Powerboard	SAA120203EA	MS-4081	\$24.95

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BLACK EXTENSION LEADS P337

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HP-1226



CABLE DUCTING P216

FROM
\$19.95
HB-6175



WEATHERPROOF ENCLOSURES P337

POWERBOARDS (CONTINUED)

10 WAY HOME THEATRE SURGE PROTECTED POWERBOARDS

Perfect addition for your home theatre, music gear or for home office setups. Each unit features 10 surge and spike protected outputs, including 2 wide outputs for large power adaptors. Also includes 2 x USB ports for charging Smartphones and Tablets. Surge protection and EMI/RFI filtering are provided for the mains power to all your equipment and each socket is protected three ways: through active, neutral and earth. Additional protection is provided by the built-in circuit breaker. These powerboards also have telephone protection (1 input, two outputs so doubles as a splitter), data protection for a network connection, satellite / cable TV video protection, and protection for the TV antenna.

- 10 surge and spike protected outputs
- Separate telephone/data line and TV antenna/cable TV surge and spike protection
- 10 amp resettable overload circuit breaker
- Flame retardant enclosure
- Protection neon indicators
- Recessed power switch
- Two outlets spaced further apart to accept larger power adaptors
- Dimensions: 360(L) x 125(W) x 32(H)mm

Leads included:

- 1.8m TV coax plug to TV coax plug
- 1.8m RJ45 to RJ45
- 1.8m RJ45 to RJ12
- 1.8m F61 plug to F61 plug

Two models available:

Power Filter	Both
Surge protection	Metal oxide varistors
Supply voltage	230-240V
Current rating	10A max. 2400W
Protection mode	A-N, N-E, E-A
Max surge current	MS-4021: 52,000A MS-4034: 144,000A
Typical capacitance	400pF
Clamping voltage (@50A)	<775V
Energy absorption	MS-4021: 1550J, MS-4034: 4300J
Response time	< 2 ns
Filtration	EMI /RFI

MS-4021

MS-4034

Telephone Line Protection

Filter type	Gas tube arrestor	TV Surge Protection	Gas tube arrestor
Surge current	1200A (1KV/μs)	DC Strike Voltage	230 to max. 600 volts
Impulse discharge current	10KA (8/20μs)	Surge current	4500A
Capacitance	<5pF	Energy Dissipation	225 joules
Clamping voltage	600V	Response Time	<10ns



Surge Protection	Approval Number	Cat.	Qty 1+	Qty 4+	Qty 10+
10 Way 52,000A	SAA131528EA	MS-4021	\$54.95	\$49.45	\$43.90
10 Way 144,000A	SAA131528EA	MS-4034	\$79.95	\$71.95	\$63.95

MAINS OUTLET TIMERS

24 HOUR MECHANICAL MAINS TIMER

Control any 240V mains appliance rated up to 10A. Turn the heater on before you get up in winter, turn the lights on or off when you're out or control a watering system. Simply push and rotate the dial to the time you want, then switch it on.

- Suits any 240V 10A GPO
- Size: 120(H) x 76(W) x 50(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
10A 240VAC	MS-6112	\$9.95	\$8.75	\$7.75

DIGITAL MAINS TIMER SWITCH MODULES

Ideal for automating your heating & lighting or practically any other switching application that requires multiple unattended switching cycles. The timer has eight on/off settings that can be programmed to function on any day, or combinations of days across the week. Each of the on/off settings can be set independently. Each On/Off setting can be associated with a range of days from a single day to every day, thus giving 56 possible on/off cycles per week.

Two models available.

- 12VDC supply voltage
- Switching capacity: 16A @ 240VAC
- Cat AA-0361
- 240VAC supply voltage.
- Switching capacity: 30A @ 240VAC
- Cat AA-0362



	Cat.	Qty 1+	Qty 4+	Qty 10+
16A 12VDC	AA-0361	\$59.95	\$53.95	\$47.90
30A 240VAC	AA-0362	\$59.95	\$53.95	\$47.90

MAINS TIMER WITH LCD

Mains timers have been common in households for many years but most are of low quality and lacking in features for more advanced timing. Our model is manufactured from quality components to provide long term reliable service and 100% electrical safety approved so you can use it with confidence. Featuring 8 on/off programmes across 16 combinations of days or blocks of days for unrivalled flexibility. In addition, there is a random function which will turn devices on and off at unspecified times of the day and a one touch "summertime" button to easily convert to daylight saving time when it arrives. Internally this unit has a switching contact rated at 30 amps, not 10 amps like the cheap ones from the hardware store. While you cannot connect a load exceeding 10 Amps to this unit, it does allow you to use it with electrical items with high start-ups like HID lighting ballasts which destroy cheap units.

- Great for indoor gardening, hydroponics, security lighting and much more.



POWERTECH

Specifications	MS-6110
Voltage	220-240VAC 50Hz
Switching contact	30 amp Internal
Max load	10A, 2400W
Operating temperature	-10 ~ +40° C
Operating modes	12 or 24 hour
Min setting time	1 minute
Accuracy	+/- 1 minute per month
Battery backup	Ni-MH 1.2V providing > 100 hours

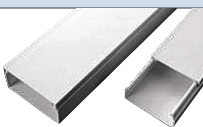
	Cat.	Qty 1+	Qty 4+	Qty 10+
10A 240VAC	MS-6110	\$24.95	\$22.35	\$19.70

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

LET'S FIND EVERYTHING YOU NEED!

FROM
\$6.95
HP-1330



CABLE DUCT

P216

FROM
\$1.95
HP-0752



CABLE CLAMPS

P220

FROM
\$39.95
MS-4009



WALL PLATE WITH USB

P342

FROM
\$9.95
PP-4019



TRAVEL ADAPTORS

P341

MAINS OUTLET CONTROL & PROTECTION

WI-FI CONTROLLED SMART MAINS SOCKET

Have control over your electronic devices inside your home or office from anywhere! From lights to heater, from stereos to grooming devices, you can turn your plugged devices on or off from your Smartphone remotely. This Wi-Fi Controlled Mains Power Socket connects to your home Wi-Fi network, and to any internet enabled Smartphone. The APP gives you control over your devices, including a timer. MS6124 contains power monitoring ability to the connected device as well as the common features shared between the two models.

NEW
2015

Specifications	Both
Input	230V - 10A, 50Hz
Output	230V-10A max
Dimensions	125(L) x 70(W) x 50(D)mm

Features MS-6122

- Remote control - Turn on/off your electrical appliances from anywhere.
- Countdown Timer - Never over charge your electronics again.
- Anti-theft Timer - Pretend you are home and guard your house.
- Schedule Timer - Perform routine operation automatically for your home appliances.
- App available for both Android® and Apple® devices

Features MS-6124

- Power meter - Demonstrate power trend in different cycles.
- Remote control - Turn on/off your electrical appliances from anywhere.
- Countdown Timer - Never over charge your electronics again.
- Anti-theft Timer - Pretend you are home and guard your house.
- Schedule Timer - Perform routine operation automatically for your home appliances.
- APP available for Android® and iOS®

MS-6122

MS-6124



	Cat.	Qty 1+	Qty 4+	Qty 10+
Wi-Fi Socket	MS-6122	\$59.95	\$53.95	\$47.90
Wi-Fi Socket with Power Meter	MS-6124	\$64.95	\$58.50	\$51.95

240V MAINS WI-FI WIRELESS SWITCH MODULE WITH APP

Designed to transform your traditional one way mains power point into a modern Wi-Fi switch so you can control connect devices via your Smartphone, from anywhere. It features a schedule timer to automatically turn devices on and off, and a countdown timer to turn devices off after a pre-set time period. The App for this unit can be freely downloaded from Google® Play and App. Store.

System requirements:

- Wi-Fi router
- iPhone®, iPad®, or iPod® (iOS® 6.0 or higher)
- Android® devices with Android® 4.0 or higher

Specifications	MS-6126
Electrical rating	120V/15A/60Hz/1800W
Wi-Fi	2.4GHz 802.11b/g/n
Dimensions	53(W) x 50(L) x 16(D)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
15A 240VAC	MS-6126	\$39.95	\$35.90	\$31.90

NEW
2015



IR CONTROLLED WIRELESS MAINS SOCKETS

These IR controlled wireless mains sockets allow you to turn the power to your appliances or equipment ON or OFF by using an otherwise unused button on an existing remote control. Simply program the sockets and assign them to whatever unused button you want on your TV or other remote control to turn the sockets ON and OFF - no need for yet ANOTHER remote control! Allows multiple sockets to be controlled from the one button or assign one button per socket; it's entirely up to you. Includes IR receiver units and 2 wireless mains sockets, extra sockets are available separately with a maximum of 200 sockets per IR receiver unit.

- Up to 20m range
- 10A, 2400W rated
- Frequency: 433MHz
- Includes 2 x AA Alkaline batteries (for IR receiver unit)

Spare Wireless Mains Socket MS-6157

	Cat.	Qty 1+
IR Controlled Mains Socket	MS-6158	\$9.95
Spare Mains Socket	MS-6157	\$4.95

MS-6158

NEW
LOW
PRICE



MS-6157



WIRELESS 3 OUTLET MAINS CONTROLLER



MS-6142

Simply plug in any mains appliance rated up to 10A and use the remote to turn each one on or off individually, or control all of them together. One of the outlets also has an LED night light that's also operated with the remote, so you can see where you're going if you have to get up during the night for the elderly, disabled or for making sure the TV and other appliances are turned off at the mains before you go to bed.

- 433MHz
- Remote battery included
- 10A, 2400W rated
- Remote measures: 125(W) x 45(H) x 17(D)mm

MAINS OUTLET/LIGHT WITH REMOTE

Cat MS-6145



MS-6145

	Cat.	Qty 1+	Qty 4+	Qty 10+
Wireless 3 Outlet Mains Controller	MS-6142	\$44.95	\$40.45	\$35.90
Mains Outlet/Light with Remote	MS-6145	\$24.95	\$22.35	\$19.70

MAINS SAFETY SWITCH

SINGLE RCD (SAFETY SWITCH) OUTLET

RCDs (residual current devices), also commonly called safety switches, are designed to cut the power in a fraction of a second in the event of a fault condition, thereby preventing electrocution. The electrics in your house may be too old to have RCDs installed, or you might want to use a power tool outdoors on an outlet that doesn't have an RCD fitted - use this handy portable one instead. Buy one right now if you don't have RCDs already

Note: RCDs are not a substitute for common sense around mains electricity. While they will work in most situations, they may not in some cases and are not a substitute for current overload devices such as fuses and circuit breakers. Wiring, appliances, leads and power outlets must always be maintained in a safe condition.

- Test function
- Reset button
- 10A 240V rated



	Cat.	Qty 1+	Qty 4+	Qty 10+
10A 240VAC	MS-4013	\$27.95	\$24.95	\$22.35

POWER SAVER

MAINS STANDBY POWER SAVER WITH IR RECEIVER

Save on energy bills, reduce your carbon footprint and prolong the lifespan of your electricals. This energy saving device eliminates the needless power consumed by your appliances when they are in standby or idle mode. With your appliances plugged into this unit, once it detects that they are in standby mode, it will switch them off completely after a short delay. The easy-program infrared receiver will read your remote signals, so switching all your appliances on again is as simple as pressing the on button on the remote control for your TV, DVD, or home theatre system.

- Saving energy has never been this easy.
- Dimensions: 128(H) x 65(W) x 40(D)mm



NEW
LOW
PRICE



	Cat.	Qty 1+
	MS-6146	\$9.95

MONITOR YOUR POWER & SAVE

MAINS POWER METER

This intelligent power meter simply plugs into a normal power point (GPO) and turns it into a real-time power monitoring outlet. You can enter the local price of your electricity and the meter will tell you exactly how much the appliance is costing to run. In addition, the power meter tracks the power used and can display the instantaneous voltage or current being drawn as well as the peak levels that have been drawn. The meter has backup batteries so it will not lose the stored data during a blackout or moving from point to point.

- Simple to install and a valuable tool for monitoring your power consumption.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6115	\$21.95	\$19.70	\$17.35

DELUXE LARGE SCREEN POWER METER WITH 1M EXTENSION LEAD

This deluxe power meter allows you to monitor the energy consumption of an appliance with the added convenience of being able to read the large LCD screen via an extension cord. It will instantly display the voltage, wattage or cost usage of your hard to reach appliances such as fridges, heaters or dishwashers.

- Easy to read large display
- Max load: 10A/2400W
- Supplied with 1m extension cable
- Dimensions: 160(L) x 73(W) x 38(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6119	\$34.95	\$31.45	\$27.90

ELITE HOUSEHOLD POWER MONITOR



Take command of your power usage and reduce your power bills with this household power monitor. It's common knowledge that energy costs are always rising, and the best and cheapest way to reduce your energy costs is by reducing your energy consumption. By using one of these fantastic power monitors, you can be informed with live power usage information and adapt your energy usage habits to reduce your power bills. There is no tricky wiring involved either; a wireless transmitter is installed in your meter box with a sensor that simply clips over the main power wire (no cutting!), which then measures the current flow and sends that information wirelessly to the indoor display. The indoor display then shows the live power consumption as well as a whole host of other features. Each monitor works with single or 3-phase (extra sensor pack MS-6201 needed for 3-phase).

The MS-6200 power monitor is the most basic in the range, with all the power data received by the indoor LCD display and stored internally on that display. The indoor LCD display gives you clear live power consumption, live running costs, stores your usage by day/week/month, and calculates your average daily, weekly and monthly power and running costs. You can program multiple tariffs as well, for those on time-of-use metering. The kit includes weatherproof transmitter with CT sensor and indoor LCD display. Transmitter and LCD display each powered by 3x AA batteries (required).

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6200	\$119.00	\$106.95	\$94.95

STORE DETAILS

For store locations and opening hours see the back cover of this catalogue or download our "Store Locator App".



HOME HUB SOLO - HUB ONLY

If you like the idea of the online Engage Hub, but also want the convenience of an "always on" LCD display in the home, you can simply install the MS-6200 Elite Power Monitor, and then add the MS-6205 Engage Home Hub Only. The MS-6205 Engage Hub will then link to the transmitter from the MS-6200 Elite Monitor, giving you both the LCD display and the link to your Smartphone/Tablet/PC.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6205	\$99.95	\$89.95	\$79.95

HOUSEHOLD POWER MONITOR WITH USB CONNECTION



For those who like to analyse their power usage data a little more in depth, this power monitor is the model to go for. Just like the Elite monitor, this model receives all the power consumption data on the indoor LCD display, giving live power use and running costs, stores the daily/weekly/monthly power consumption data, and gives averages for daily/weekly/monthly power use and costs. To add to this, it has a USB port so you can connect it to your PC and download the data into the supplied software, giving you handy graphs and historical charts to further enhance your power monitoring ability. Kit includes weatherproof transmitter with CT sensor, indoor LCD display and USB cable.

- Transmitter and LCD display each powered by 3x AA batteries (required).



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-6202	\$139.00	\$124.95	\$110.95

HOME HUB ONLINE HOUSEHOLD POWER MONITOR, WITH APP



This Home Hub is the ultimate solution for the most tech savvy users, allowing you to monitor your power use in real time from anywhere with an internet connection! All you need is your Smartphone/Tablet/PC, an internet connection, and you can view your energy monitor from anywhere in the world. It combines all the features you would expect from a household power monitor, but uses your internet enabled device to display the data rather than a separate LCD display. It still has the transmitter in the meter box like other Efergy units, which transmits to the Engage Hub that is connected to your internet router, which then uploads the data to cloud server. The app/website then gives you dashboards with real time power use, historical charts, daily/weekly/monthly use and costs, power limit warnings, and much more.

The kit includes wireless transmitter with CT sensor, Home Hub, AC power supply, and Ethernet cable. Transmitter powered by 3x AA batteries (required).

The Home Hub is able of monitoring up to 5 transmitters, so you can measure your home energy use and also the output from your rooftop solar system, for example. Extra transmitters sold separately (MS-6203).



⬆	Cat.	Qty 1+	Qty 4+	Qty 10+	
	Power Monitor	MS-6204	\$129.00	\$115.95	\$102.95
	Extra Transmitter & Sensor	MS-6203	\$49.95	\$44.90	\$39.90

EXTRA SENSORS TO SUIT POWER MONITORS, FOR 3-PHASE SYSTEMS - 2 PACK

Purchase this pack of 2 sensors if you need to monitor a 3-phase system.

- 2 sensors
- Suits MS-6200, MS-6202, MS-6204



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Pack	MS-6201	\$39.95	\$35.90	\$31.90

LED STRIP LIGHTING

SOLID LED STRIP LIGHTING

SOLID LED STRIP LIGHTS - 12 OR 24VDC

An efficient, bright and affordable LED lighting solution, which is safe and easy to install. Each strip features wide angle, high brightness SMD LEDs which are powered by either 12VDC or 24VDC. They are fixed easily using the strong 3M brand self adhesive backing tape or mounted into a range of aluminium and plastic extrusions and diffusers available separately. Each 500mm length can be snapped into individual segments and are powered by either 12VDC or 24VDC. Applications include under cabinet kitchen bench lighting, hallway or mood lighting, marine/caravan/motorhome lighting, commercial strip lighting, retail shop fit outs, and many many more.

• Available in 8mm and 11mm widths, 12VDC or 24VDC, and in a choice of warm or cool white

* COMPATIBLE WITH OUR ALUMINIUM CHANNEL SYSTEM, HH-8535

	ZD-0461	ZD-0463	ZD-0467	ZD-0550	ZD-0552	ZD-0554
Voltage	12VDC	12VDC	24VDC	12VDC	12VDC	24VDC
Colour	White	Warm white	Warm white	Warm white	White	Warm white
Current	200mA	200mA	100mA	500mA	500mA	200mA
Lumen output	150	125	125	340	390	280
LED quantity	30 x 3528	30 x 3528	30 x 3528	30 x 5050	30 x 5050	25 x 5050
No. of segments	10	10	5	10	10	5
Light angle	120°	120°	120°	120°	120°	120°
Dimensions	500x8mm	500x8mm	500x8mm	500x11mm	500x11mm	500x11mm

Features:

- 8mm strips fitted with 3528 single chip SMD LEDs
- 11mm strips fitted with 5050 tri-chip SMD LEDs
- Strips can be snapped into individual segments and powered individually
- Strips can be integrated with our aluminium and plastic extrusions and diffusers



Size	Colour	Voltage	Cat.	Qty 1+	Qty 10+	Qty 25+
8mm	Cool White	12V	ZD-0461	\$14.95	\$13.35	\$10.35
8mm	Warm White	12V	ZD-0463	\$14.95	\$13.35	\$10.35
8mm	Warm White	24V	ZD-0467	\$8.95	\$7.95	\$6.25
11mm	Warm White	12V	ZD-0550	\$19.95	\$17.70	\$13.70
11mm	Cool White	12V	ZD-0552	\$21.95	\$19.70	\$15.25
11mm	Warm White	24V	ZD-0554	\$11.95	\$10.70	\$8.25

IP66 ALUMINIUM BACKED LED STRIP LIGHT - 12VDC



When a degree of weather protection is required for your LED strip lighting, look no further. IP66 rated, with a solid aluminium backing for installation in tougher environments, these are the LED strip lights of choice for marine, caravan, motorhome, or outdoor domestic and architectural applications. Powered by 12VDC and available in warm white and cool white colour temperatures, with fly leads and weatherproof connectors already fitted for ease of installation.

Specifications	
Voltage	12VDC
Colour	White
Current	200mA
Lumens	150
LEDs	30x 3528
Dimensions	500x8mm

NEW LOW PRICE

1 YEAR WARRANTY

LED	Length	Cat.	Qty 1+	Qty 10+	Qty 25+
30 x White	500mm	ZD-0468	\$16.95	\$14.95	\$11.70

EXTRUDED ALUMINIUM CHANNELS WITH DIFFUSERS FOR LED STRIPS



Designed to house and diffuse the light from LED strips, and adaptable to many different applications. There is a standard aluminium channel, a corner mount channel for mounting in corners and firing the LEDs at 45°, and a 2-piece channel for keeping all mounting screws and wiring completely hidden. Each unit comes with frosted opaque and solid white diffusers, as well as channel end caps to seal the LED strip inside safely and plastic mounting clips (not included in HH-8549).

EXTRUDED ALUMINIUM CHANNEL WITH DIFFUSERS FOR LED STRIPS

• Dimensions: 1000(L) x 17.3(W) x 15(H)mm
HH-8547

Note: LED strip not included

Suits the following LED strips:
ZD-0575, ZD-0570, ZD-0579
ZD-0550, ZD-0577, ZD-0572

ALUMINIUM EXTRUSION FOR CORNER MOUNTING LED STRIPS

• Dimensions: 1000(L) x 25(W) x 25(D)mm
HH-8548

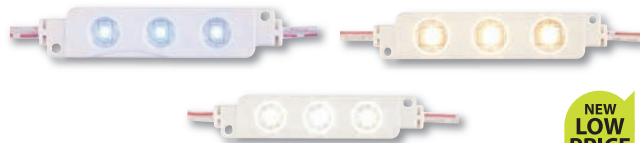
EXTRUDED 2-PIECE HIDDEN MOUNTING ALUMINIUM CHANNEL WITH DIFFUSERS FOR LED STRIPS

• Dimensions: 1000(L) x 19.8(W) x 19.7(H)mm
HH-8549

Length	Cat.	Qty 1+	Qty 10+	Qty 25+
Standard Channel 1 metre	HH-8547	\$22.95	\$20.35	\$15.95
Corner Mounting 1 metre	HH-8548	\$19.95	\$17.70	\$15.70
2 Piece Channel 1 metre	HH-8549	\$29.95	\$26.90	\$20.70

IP65 LED LIGHTING MODULE STRINGS - 12VDC

A very flexible and weatherproof (IP65) solution for low power lighting; use for backlighting of signs, illuminating stairwells, marine lighting, caravan lighting, etc. Each string is supplied as a 1m length of wire, with ten "modules" containing three high brightness SMD LEDs along the length of the string. You can cut the string to supply power to each module separately if you wish, allowing for a whole host of different applications. Simply provide 12VDC power and you are in business. Available in standard 3528-LED or ultra-bright 5050-LED versions, and in cool white, warm white or blue colours depending on the model you choose.



NEW LOW PRICE

	ZD-0590	ZD-0592	ZD-0593
Voltage	12VDC	12VDC	12VDC
Colour	Cool White	Warm white	Blue
Current	300mA Total	300mA Total	200mA Total
Lumen output	13.5/135 total	13.5/135 total	5.1/51 total
LEDs	10x (3x3528)	10x (3x3528)	10x (3x3528)
Light angle	120°	120°	120°
Dimensions	71x15x5.5mm	71x15x5.5mm	71x15x5.5mm

	ZD-0594	ZD-0596
Voltage	12VDC	12VDC
Colour	Cool White	Warm white
Current	600mA Total	600mA Total
Lumen output	50/500 total	340/400 total
LEDs	10x (3x5050)	10x (3x5050)
Light angle	120°	120°
Dimensions	83x17x6mm	83x17x6mm

LEDs	Colour	Cat.	Qty 1+	Qty 10+	Qty 25+
3x3528	Cool White	ZD-0590	\$15.95	\$14.35	\$10.95
3x3528	Warm White	ZD-0592	\$14.95	\$13.35	\$10.35
3x3528	Blue	ZD-0593	\$15.95	\$14.35	\$10.95
3x5050	Cool White	ZD-0594	\$29.95	\$26.90	\$20.70
3x5050	Warm White	ZD-0596	\$24.95	\$22.35	\$17.35

ACCESSORIES TO SUIT SUPERCEDED EXTRUDED ALUMINIUM CHANNEL



HH-8540

HH-8536



NEW LOW PRICE

	Cat.	Qty 1+
Diffuser Insert Strip Flanged Clear	HH-8540	\$9.95
Channel Endcap (pack of 2)	HH-8536	\$1.95

SOLID LED STRIP LIGHTING (CONTINUED)

LED ALUMINIUM LIGHT STRIP WITH SWITCH - 240VAC

A range of LED aluminium light in elegant aluminium strips. A simple and straight forward solution; each strip is terminated with a 240V plug and lead. No time consuming wiring and costly electricians are required. Simply plug in to the mains outlet and you have instant lighting solution. It has a built-in switch and is IP44 rated making it ideal for kitchen, under cabinets, book cases, bathroom lighting applications. Power consumption is significantly lower than fluorescent alternatives.



- LED Light strips meet SAA Safety approvals.
- Voltage input: 240VAC
- IP Rating: IP44
- Colour Temperature: Cool White

24 LED ALUMINIUM LIGHT STRIP

- 450 lumens
- 450mm long
- ST-3944

78 LED ALUMINIUM LIGHT STRIP

- 1350 lumens
- 1200mm long
- ST-3948

48 LED ALUMINIUM LIGHT STRIP

- 450 lumens
- 850mm long
- ST-3946

LEDs	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
24	450mm	ST-3944	\$34.95	\$31.45	\$27.90
48	850mm	ST-3946	\$46.95	\$40.45	\$35.90
78	1200mm	ST-3948	\$59.95	\$53.95	\$47.90

LED LIGHT STRIPS WITH SWITCH - 12VDC

A quick and easy LED strip light solution. The LED strip is pre-assembled in the channel diffuser with an integrated switch encased in attractive anodised aluminium alloy. They feature a generous beam angle with evenly distributed light thanks to the frosted white diffuser. Great for use on window displays, restaurant foyers, showrooms, hotels, and caravan or RV applications. Four mounting screws are included for fast and easy installation. Available in 48 and 84 LED strips.

Specifications:

- Input: 3.5 x 1.35mm DC socket centre positive
- LEDs: 3528 SMD
- 4 x mounting screws included

48 LED LIGHT STRIP



- Power rating: 12VDC 5W
- Colour temperature: 6000-6500K, Cool white
- Lumens: 280
- Dimensions: 313(L) x 30(W) x 12(H)mm
- ST-3930

84 LED LIGHT STRIP



- Power rating: 12VDC 9W
- Colour temperature: 6000-6500K, Cool white
- Lumens: 520
- Dimensions: 513(L) x 30(W) x 12(H)mm
- ST-3932

Suitable accessories:

IN-LINE DIMMER:

ST-3938 - 12VDC/24VDC LED Dimmer Switch

SPARE PLUG WITH 100MM LEAD

ST-3933

LEDs	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
48	313mm	ST-3930	\$19.95	\$17.95	\$15.70
84	513mm	ST-3932	\$34.95	\$31.45	\$27.90
1.3mm DC Plug on 100mm Lead		ST-3933	\$4.95	\$4.45	\$4.00

LINKABLE ALUMINIUM LED STRIP LIGHTS - 12VDC

A stylish aluminium LED strip light kit. Suitable for caravan, marine, 4WD, auto and domestic applications. Connect multiple lights together with the included connectors to match your desired length and application. Supplied with a 100mm DC plug with lead for hardwiring, connecting adaptor and cable as well as a right angle adaptor. Screw mounting holes provided on the ends for easy installation in three different ways - 180°, 360° and 90°.

- Available in 48 and 84 LED linkable strips
- Suitable in-line Dimmer use ST-3938
- Colour: Cool white
- Voltage input: 12VDC
- Input: 3.5 x 1.35mm DC socket centre positive
- LEDs: 3528 SMD



Replacement 1.3mm plug with 100mm Lead available Cat. ST-3933

Specifications	ST-3934	ST-3936
Power rating	12VDC 5W	12VDC 9W
Colour temperature	6000-6500K	6000-6500K
Lumens	280	520
Dimensions	324(L) x 30(W) x 12(H)mm	524(L) x 30(W) x 12(H)mm

LEDs	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
48	324mm	ST-3934	\$24.95	\$22.50	\$19.95
84	524mm	ST-3936	\$39.95	\$35.90	\$31.90
1.3mm DC Plug on 100mm Lead		ST-3933	\$4.95	\$4.45	\$4.00

LED DIMMER SWITCH - 12VDC

Compact in-line dimmer suitable for dimmable LED lights. Rotate ON/OFF and to adjust light level. Supplied with DC jacks for easy connection between LED lights and your power supply unit.

- Suitable for use with our LED strip lights ST-3930, ST-3932, ST-3934 and ST-3936

Specifications	ST-3938
Operating voltage	12VDC
Output current (max)	2A
Output power (max)	24W/48W
Dimming	0 to 100%
Colour	White
Dimensions	68(L) x 34(W) x 33(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
In-Line Dimmer	ST-3938	\$14.95	\$13.45	\$11.95

FLEXIBLE LED STRIP LIGHTING

ULTRA BRIGHT FLEXIBLE ADHESIVE LED STRIP LIGHTS



These flexible adhesive LED strips are made using the highest brightness 5060-SMD type LEDs, and feature 60 of these LEDs per metre of stripping. Each strip comes as a 5m length, which can be broken down into individual 5cm sections with 3x LEDs that can be individually soldered to apply power. We understand that not all applications require a full 5m length, so we cut them to length and sell by the 5cm section, so that you can get the exact length you require. The strip itself is a flexible circuit board, backed with quality 3M brand adhesive tape to ensure a long term adhesion to your mounting surface. Powered by 12VDC. Two types available:

Note: Compatible with our Aluminium Channel System HH-8547, HH-8548 & HH-8549

Specifications	ZD-0570	ZD-0572
Voltage	12VDC	12VDC
Colour	Cool white	Warm White
Current per section	50mA	50mA
Current per metre	1000mA	1000mA
Lumens per metre	1200	1200
LEDs per section	3 x 5060	3 x 5060
Sections per metre	20	20
Dimension per section	50x10mm	50x10mm



	Price per	Cat.	Qty 1+	1 Metre	5 Metres
Cool White	50mm segment	ZD-0570	\$2.95	\$43.00	\$145.00
Warm White	50mm segment	ZD-0572	\$2.95	\$43.00	\$145.00

TECH TALK!

STRIP LIGHTING

Our range of LED strip lights are made using some of the most common type of SMD LEDs used in LED lighting products; the 3528 type, and the 5050/5060 type.

Their model designations actually come from their footprint dimensions:

3528 = 3.5x2.8mm, 5050 = 5.0x5.0mm, and 5060 = 5.0x6.0mm.

The 3528 type is a single LED emitter type in a very compact package, whereas the 5050 and 5060 type are commonly referred to as "triple-chip" due to having three LED emitters built into the one package.

The 3528 typically offers superior lumen performance per emitter and greater light efficiency than 5050/5060, but the 5060/5060 triple-chip types are more cost effective due to lower manufacturing costs and reduced production costs when built into a finished product.

LED STRIP LIGHTING

FLEXIBLE LED STRIP LIGHTING (CONTINUED)

ULTRA BRIGHT IP67 WATERPROOF LED FLEXIBLE STRIP LIGHT



A 1 metre long fully waterproof, flexible LED strip light that is perfect for any outdoor application needing some bright, reliable lighting. This flexible strip light uses 60 of the highest brightness 5050-SMD type LEDs that are fully sheathed in a protective plastic casing to protect from water, dust and damage. Each also features waterproof male/female connections at each end to ensure that your power connection is also protected from the elements, and at the same time allows multiple strips to be daisy-chained together to create a longer length (up to 5m max).

Specifications	ZD-0579	ZD-0578
Voltage	12VDC	12VDC
Colour	Cool white	Warm white
Current	1000mA	1000mA
Lumens	850	800
LEDs	60x 5050	60x 5050
Dimensions	1000(L) x 10(W)mm	1000(L) x 10(W)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Cool White	ZD-0579	\$49.95	\$44.90	\$39.90
Warm White	ZD-0578	\$49.95	\$44.90	\$39.90

CIGARETTE POWER LEAD TO SUIT ZD-0578/ZD-0579

Cigarette lighter power lead with IP67 2.1mm DC plug.

- Suits ZD-0578/ZD-0579 LED flexible strip lights
- 3m long



	Cat.	Qty 1+	Qty 3+	Qty 6+
	PP-1981	\$18.95	\$16.95	\$14.95

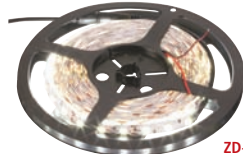
LOW COST 5M FLEXIBLE ADHESIVE LED STRIP LIGHTS



When the absolute brightest light possible isn't what you are looking for, then these competitively priced flexible LED strips are what you are looking for. These strips still use the same super efficient 5050 SMD LED package as our ultra bright LED strips, but each LED has around 20-40% less light output than our ultra bright versions. Everything else is the same; there are 60 LEDs per metre, the flexible strip can be cut into sections every third LED to create separate strips to your desired length, the strip is backed with 3M brand adhesive tape, and each section has solder pads to enable you to wire up to your desired configuration. Sold as a full 5 metre reel in cool white and warm white colours, they are an excellent solution to thousands of lighting applications such as display cabinets, under bench lighting, accent lighting, caravan/camping, 4WD, mood lighting, etc.

Two versions available.

Specifications	ZD-0575	ZD-0577
Voltage	12VDC	12VDC
Colour	Cool white	Warm white
Current per section	55mA	55mA
Current per metre	1100mA	1100mA
Lumens per metre	970lm	950lm



ZD-0575

	Price per	Cat.	Qty 1+	Qty 3+	Qty 6+
Cool White	5m Roll	ZD-0575	\$69.95	\$62.95	\$55.95
Warm White	5m Roll	ZD-0577	\$69.95	\$62.95	\$55.95

RGB LED FLEXIBLE STRIP LIGHTING KIT WITH EFFECTS



An easy to setup RGB LED strip that can produce an array of dazzling effects. The device controls each bank of 3 x LED's individually to create effects that emulate flowing water, a shooting star, curtains opening, a colour gradient and more. Using the remote control you can switch all LEDs to white, red, green, blue, yellow, purple etc, adjust the brightness or set it up to cycle through all the different effects. Lighting applications include cinema foyers, nightclubs, casinos etc.

The kit includes a 5m reel of high brightness RGB LEDs with 3M adhesive backing, a power supply remote control, and a joiner to connect LED strips together.

Kit contains:

- 5m RGB LED lighting strip
- Infrared remote control
- Power supply
- LED strip joiner



Specifications	SL-3954
Input voltage	12VDC
5m reel contains	150 X RGB LEDs
Controller dimensions	94(L) x 58(W) x 25(H)mm

	Roll Length	Cat.	Qty 1+	Qty 3+	Qty 6+
RGB	5 metres	SL-3954	\$139.00	\$124.95	\$110.95

FLEXIBLE LED STRIP LIGHT WITH HOOK & LOOP BACKING



A simple solution for campsite lighting. Just plug it into a 12V cigarette lighter socket, flick the switch and you have over 1,000 lumens of brilliant white light to light up under your awning, inside a tent, or anywhere else around the campsite. The 1.2m long LED strip is fitted inside a fabric strip with hook and loop backing allowing you to easily attach it to tent poles or awning frames. Metal hooks are also fitted for alternative mounting options.

- The supply cord is 5m long with a waterproof in-line switch
- LED strip is IP67 waterproof
- Includes carry bag.

Specifications	ST-3950
Rating	IP67 Waterproof
Input	12VDC
Input current	1.0A
Colour	Cool white, 5500K
Lumens	1200
LEDs	72 x 5050SMD
Switch	Waterproof in-line switch
Cord length	5m
Dimensions	1350(L) x 50(W) x 7(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Cool White	ST-3950	\$99.95	\$89.95	\$79.95

JAYCAR ENVIRO-BAGS

Free with any purchase over \$50.
Two sizes available!



LET'S FIND EVERYTHING YOU NEED!

FROM
\$24.95
MP-3480



12V POWER SUPPLIES P333

FROM
\$7.95
WH-5525



HEATSHRINK P215

FROM
\$11.95
TH-1897



CUTTERS P131

FROM
\$1.85
HP-1200



CABLE TIES P218

LED DOWNLIGHT KITS - 240VAC

LED downlights have a lot of benefits over their traditional halogen counterparts, the biggest of which are their significantly lower power consumption (around 70 - 90% less), longer life expectancy (50,000 vs 2,000 hours) and significantly

lower heat generation. Installation is generally easy for both new applications and retrofitting of globes. See our website for full details and specifications.

13W LED DOWNLIGHT WITH REMOTE CONTROLLED COLOUR TEMP & BRIGHTNESS KIT - 240VAC

These high lumen output, energy efficient LED Downlights are economical, environmentally friendly, and most importantly, user friendly. Each LED Downlight is rated to a low 13W but can produce an impressive output of up to 850 lumens. Each is supplied with a driver and a mains lead already pre-terminated to each component when supplied. They are also controlled by remote, which allows you to control; The colour temperature from Warm White to Cool White to Daylight White, the brightness output from 100% down to 20% and to switch the power on or off. The remote control has four channels that allows you to pair off groups, each channel can pair up to 10 downlights, allowing a maximum system of 40 downlights paired on to 1 remote. Each system can be controlled by up to 6 remotes as well.

You can also add some Wi-Fi connectivity to this Remote Controlled Downlight System with the Wi-Fi Control Box (SL-2338). When paired to the Wi-Fi Control Box, you can download a free app on your iOS® or Android® Smartphone or Tablet, and have a virtual remote control on your hand held device. These 13W LED Downlights is available in three designs, a Gymbal mount with a flushed surface, a Recessed surface and a Flush surface. All models made in die-cast aluminium for added durability. Ideal for both domestic and workplace applications.

GYMBAL MOUNTED DOWNLIGHT WITH REMOTE CONTROL KIT - SL-2330

Included: Downlight, Driver, Mains lead, RF Remote Control

GYMBAL MOUNT - SL-2332

Includes: Downlight, Driver, Mains lead

RECESSED SURFACE - SL-2334

Includes: Downlight, Driver, Mains lead

FLUSH MOUNT - SL-2336

Included: Downlight, Driver, Mains lead

WI-FI CONTROL BOX - SL-2338

- Power: USB, 5V
- iOS® and Android® Free App available

RF REMOTE CONTROL - SL-2339

- Power: 2 x AAA batteries included
- Signal: 2.4GHz
- Control Distance: 30m

Specifications	SL-2330	SL-2332	SL-2334	SL-2336
Power	13W	13W	13W	13W
Input voltage	240VAC	240VAC	240VAC	240VAC
LED type	SMD5630	SMD5630	SMD2835	SMD2835
Output	850lm	850lm	850lm	850lm
Output Angle	90°	90°	90°	90°
Colour temperature	3000K-6000K	3000K-6000K	3000K-6000K	3000K-6000K
Dimmable	100%-20%	100%-20%	100%-20%	100%-20%
CRI	80Ra	80Ra	80Ra	80Ra
Cut-out	90mm	90mm	90mm	90mm

↑		Cat.	Qty 1+	Qty 3+	Qty 6+
	13W 850 Lumens - Gymbal Mounted Downlight with Remote Control Kit	SL-2330	\$69.95	\$62.95	\$55.95
	13W 850 Lumens - Gymbal Mount Downlight	SL-2332	\$59.95	\$53.95	\$47.90
	13W 850 Lumens - Recessed Surface Downlight	SL-2334	\$59.95	\$53.95	\$47.90
	13W 850 Lumens - Flush Mount Downlight	SL-2336	\$59.95	\$53.95	\$47.90
	Wi-Fi Control Box	SL-2338	\$69.95	\$62.95	\$55.95
	RF Remote Control	SL-2339	\$19.95	\$17.95	\$15.70

8W DIMMABLE LED DOWNLIGHT KITS - 240VAC

A true replacement for a 50W halogen downlight. Featuring the same remote phosphor technology used in all Viribright LED lighting products, they offer excellent light output, efficiency, a wide beam output and high colour rendering for true colour illumination. Fully dimmable with traditional electronic light dimmers or our LED dimmer PS-4084, suitable for a ceiling cut out of 75-92mm and supplied with a 2-pin mains lead. Fantastic for DIY replacement of existing halogen downlights, or a totally new installation. Powered directly by 240VAC so there is no need for external LED drivers. Fully approved for electrical safety and even approved for the NSW 'ESS' and Victoria 'VEET' commercial lighting energy saving schemes (electricians take note!). Available in warm white or natural white.

VRIBRIGHT
The bright side of light

NEW LOW PRICE

Specifications	SL-2300	SL-2302
Power	8W	8W
Input voltage	240VAC	240VAC
Lumens	550	700
Equivalent halogen	50W	50W
Colour	Warm white	Natural white
Colour temp.	2800K	4000K
Beam angle	80°	80°
CRI	>85	>85
Ceiling cutout	75-92mm	75-92mm

↑		Cat.	Qty 1+	Qty 3+	Qty 6+
	8W Warm white	SL-2300	\$39.95	\$35.90	\$31.90
	8W Natural white	SL-2302	\$39.95	\$35.90	\$31.90

ECOLUME MAINS 15W DOWNLIGHT KITS - 240VAC

A more energy efficient solution to halogen or CFL downlights, these 100mm LED downlights are powered by 6 x Osram® Osdon Square EC, featuring the latest in efficient LED technology from Osram. The result is a phenomenally bright light output; even higher than a 55W halogen, with over 800 lumens of light produced! Besides the significant power savings (over 75%!) we should also highlight that being LED, the 15W Ecolume downlights operate at significantly lower temperatures with no ultraviolet and carbon emissions, and will provide 50,000 hours plus of service life. Each downlight kit is supplied with a dimmable LED driver (Clipsal® trailing edge recommended) and the adjustable gimbal housing finished in white colour. Truly a high quality product with outstanding performance, we are giving these a 3 year replacement warranty.

Two models available:

Specifications	ZD-0373	ZD-0376
Housing	Gimbal	Gimbal
Colour	Warm White	Neutral White
Colour Temp.	3000K	4000K
Beam Angle	40°	40°
Lumen output	800	840
Equivalent halogen light	55W	55W
Ceiling cutout	83-90mm	83-90mm
Length	120mm	120mm

↑		Cat.	Qty 1+
	15W Warm White	ZD-0373	\$39.95
	15W Neutral White	ZD-0376	\$39.95

NEW 2015

POWER & SMART ENERGY

1
YEAR WARRANTY

NEW LOW PRICE

3
YEAR WARRANTY

ecolume

LED DOWNLIGHT REPLACEMENT LAMPS & ACCESSORIES

LED DOWNLIGHT KITS - 240VAC (CONTINUED)

GU10 LED MAINS VOLTAGE DOWNLIGHT KITS - 240VAC

Simply cut a hole and drop them in, or replace your existing halogen downlights. Mains powered, so no additional power supplies, transformers or ballasts required, just get an electrician to wire them straight in to 240VAC. Being LED rather than halogen, they use 1/10th the power, last over 50,000 hours, or over 20 years if run for 6 hours per day! The GU10 LED lamps supplied with each kit feature three Cree® XP-G LEDs, running at 2W each to produce a light output equivalent to a 30W halogen globe. Each assembly includes a junction box and spring clips to mount to any surface up to 25mm thick. White or warm white colour temperature, sold in a single kit or a pack of four.



CREE
LEDs

- Cut-out: 90mm
- Length: 63mm
- Light output: White 450 lumens, warm white 350 lumens
- Dimmable (with regular trailing or leading edge dimmers)

NEW LOW PRICE



↑		Cat.	Qty 1+
3 x 2W	Warm White	1 Pack ST-3897	\$19.95
3 x 2W	Warm White	4 Pack ST-3899	\$69.95

LIGHTING ACCESSORIES

200W MAINS DIMMER SWITCH

Suitable for Dimmable LED Bulbs or Incandescent lights.

- Push ON/OFF or rotate to adjust light level.
- Operating Voltage: 200-240VAC, 1A
- Maximum Power: 200W
- Control Type: Single Pole (One Location)
- Configuration: Leading Edge or Trailing Edge
- Colour: White



↑		Cat.	Qty 1+	Qty 10+	Qty 50+
240VAC		PS-4084	\$24.95	\$22.35	\$19.70

ELECTRONIC TRANSFORMERS FOR LED LIGHTS

These electronic transformers are designed to be used with LED lighting products that take a 12V power source, for example our LED MR16 replacement globes, and provide the same kind of efficient power delivery and compact size as a normal electronic transformer. Electronic transformers that are intended for use with halogen downlights are not suitable for use with LED-replacement lighting products, since using them often causes flickering and dramatically reduces the life expectancy of the LED light. They deliver a constant 12VDC and feature short circuit, over temperature, over load and spike protection. Suitable for domestic and commercial applications, they are perfect for combining with our LED MR16 globes to replace those power-hungry halogen downlights.



↑		Cat.	Qty 1+	Qty 3+	Qty 6+
10 Watt		MP-3360	\$19.95	\$17.70	\$15.70
20 Watt		MP-3362	\$24.95	\$22.35	\$19.70

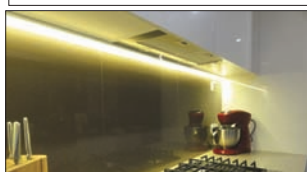
2 PIN MAINS FLEX LEAD WITH GU10 SOCKET - 1.8 METRES

When upgrading existing low voltage halogen downlights to LED alternatives, the most reliable way is to use GU10 mains LED downlights and ditch the old halogen transformer - but this might need some re-wiring and a call to an electrician. Not with this lead though!



Most low voltage downlight transformers are connected to a standard 3-pin mains socket in the ceiling cavity, so all you need to do is unplug the old low voltage downlight and transformer, plug in this lead, and voila - you now have a mains GU10 downlight socket. Simple!

↑		Cat.	Qty 1+	Qty 10+	Qty 50+
1.8m		PS-4118	\$12.95	\$11.35	\$10.35



MR16 REPLACEMENT LED LAMPS - 12VAC/DC

MR16 4.5W LED DOWNLIGHT/SPOTLIGHTS - 12VAC/DC

A direct replacement for 35W MR16 12V halogen downlight bulbs that provide up to 80% energy savings over halogen. They boast a long life of over 25,000 hours, low energy consumption, low heat emissions and no hazardous mercury. To make retrofitting even easier, these MR16 LED lamps from Viribright are also compatible with electronic downlight transformers, no flickering issues to contend with! Perfect for downlight, track, accent and recessed lighting applications. Whilst the rated lumen output appears lower than other LED globes, you must note that these are the independently tested/verified lumen outputs, not the "theoretical" lumen output based on what the LED datasheet says. So in reality a side by side test will likely show the Viribright light to produce more light. Available in 60 degree and 140 degree beams, in warm, natural and cool white colours. Note: Not dimmable.

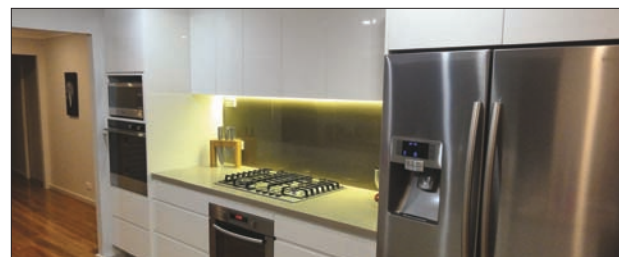
VIRIBRIGHT
The bright side of light

DOWNLIGHT (140° BEAM)

- Beam spread: 140°
- Dimensions: 50(Dia.) x 52(H)mm



Cat No.	Lumens	Colour	Colour temp
ZD-0600	270	Natural white	4000K
ZD-0603	270	Cool white	6000K
ZD-0602	240	Warm white	2800K



SPOTLIGHTS (60° BEAM)

- Beam spread: 60°
- Dimensions: 50(Dia.) x 58.5(H)mm



Cat No.	Lumens	Colour	Colour temp
ZD-0604	250	Natural white	4000K
ZD-0605	250	Cool white	6000K
ZD-0606	220	Warm white	2800K

↑	Lumens	Colour	Cat.	Qty 1+	Qty 3+	Qty 6+
270		Natural white	ZD-0600	\$19.95	\$17.70	\$15.70
270		Cool white	ZD-0603	\$19.95	\$17.70	\$15.70
240		Warm white	ZD-0602	\$19.95	\$17.70	\$15.70
250		Natural white	ZD-0604	\$19.95	\$17.70	\$15.70
250		Cool white	ZD-0605	\$19.95	\$17.70	\$15.70
220		Warm white	ZD-0606	\$19.95	\$17.70	\$15.70

MR16 6W COB LED DOWNLIGHTS - 12VAC/DC

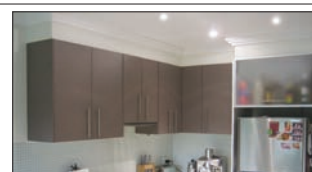
High quality MR16 low-voltage LED downlight globes featuring a "chip-on-board" (COB) 6W COB LED module that produces over 500 lumens of brilliant light, making them a true halogen replacement, providing equivalent or better light output! Built in a cold forged aluminium housing, heat dissipation is far superior to most LED downlight globes; ensuring you get the full 30,000+ hour life expectancy. If saving power and lasting a lifetime weren't enough, they are also dimmable!

- To power use MP-3209 PWM 12VDC dimmer and a suitable 12VDC power supply

Cat No.	ZD-0620	ZD-0621
Power consumption	6W	6W
LED(s)	COB	COB
Power per LED	6W	6W
Brightness	550 lumens	530 lumens
Colour	Cool white	Warm white
Input voltage	12VAC/DC	12VAC/DC
Lens angle	60°	60°
Fitting	MR16	MR16
Dimensions (dia x L)	50 x 45mm	50 x 45mm



↑	Lumens	Colour	Cat.	Qty 1+	Qty 3+	Qty 6+
550		Cool White	ZD-0620	\$34.95	\$31.45	\$27.90
530		Warm White	ZD-0621	\$34.95	\$31.45	\$27.90



GU10 REPLACEMENT LED LAMPS 240VAC

GU10 4.5W LED DOWNLIGHTS - 240VAC

Many people are now opting to install GU10 mains voltage downlights instead of MR16 12V downlights, as there is no performance difference (unlike with halogens) and it eliminates the cost of a transformer. The additional benefit is that these Viribright GU10 downlights are fully dimmable with leading and trailing edge electronic dimmers! They provide up to 80% energy saving, last over 25,000 hours, have very low heat production and contain no hazardous chemicals. Perfect for recessed downlights, track lighting and general illumination. Available in 60 degree and 140 degree beam, and in warm or natural white colour.

- Dimmable
- Mains 240VAC powered
- Over 0.9 power factor

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DOWNLIGHT (140° BEAM)

- Beam spread: 140°
- Dimensions: 50(Dia.) x 52(H)mm

Cat No.	Lumens	Colour	Colour temp
ZD-0612	240	Warm white	2800K



SPOTLIGHTS (60° BEAM)

- Beam spread: 60°
- Dimensions: 50(Dia.) x 58.5(H)mm

Cat No.	Lumens	Colour	Colour temp
ZD-0614	250	Natural white	4000K
ZD-0616	220	Warm white	2800K



↑	Lumens	Colour	Cat.	Qty 1+	Qty 3+	Qty 6+
	240	Warm white	ZD-0612	\$19.95	\$17.70	\$15.70
	250	Natural white	ZD-0614	\$19.95	\$17.70	\$15.70
	220	Warm white	ZD-0616	\$19.95	\$17.70	\$15.70

GU10 6W COB LED DOWNLIGHTS - 240VAC

The latest in high performance and high efficiency LED light sources with "chip-on-board" (COB), where multiple LED emitters are built into the one module. These high quality MR16 low-voltage LED downlight globes feature a Shineon 6W COB LED module that produces over 500 lumens of brilliant light. With such a bright output, these globes are a TRUE halogen replacement, providing equivalent or better light output! Built in a cold forged aluminium housing, heat dissipation is far superior to most LED downlight globes; ensuring you get the full 30,000+ hour life expectancy.

If saving power and lasting a lifetime weren't enough, they are also dimmable!

- Use a standard triac dimmer (Clipsal® trailing edge recommended).

Two models available:

Specifications	ZD-0625	ZD-0626
Power consumption	6W	6W
Fitting	GU10	GU10
Colour	Cool white	Warm white
Colour temp	5500K	3000K
LED type	6W COB	6W COB
Brightness	550 lumens	530 lumens
Input voltage	240VAC	240VAC
Beam angle	60°	60°
Dimensions	50(D) x 57(H)mm	50(D) x 57(H)mm



↑	Lumens	Colour	Angle	Cat.	Qty 1+	Qty 3+	Qty 6+
	550	Cool White	60°	ZD-0625	\$34.95	\$31.45	\$27.90
	530	Warm White	60°	ZD-0626	\$34.95	\$31.45	\$27.90

E14 LED REPLACEMENT LAMP - 12VDC

E14 BASE LED GLOBE - 12VDC

A very bright LED globe for any variety of applications such as solar systems, shed lighting, camping, etc, where 12VDC power is readily available. Drawing just 5W of power, and producing around 450 lumens of light, this globe is an excellent solution for energy efficient lighting.

- Fitted with an E14 screw base.

Specifications	SL-2851
Voltage	12VDC
Power	5W
Brightness	450 lumens
Colour	Cool white (5500K)
LED type	9x 5630SMD
Light angle	360°



**NEW
LOW
PRICE**

↑	Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+	
	450	Cool white	SL-2851	\$14.95	\$13.35	\$11.70

MR11 LED REPLACEMENT LAMPS - 12VAC/DC

MR11 LED REPLACEMENT LIGHT
15X2835 LEDS 120° - 12VAC/DC

High brightness MR11 LED globes commonly used for lighting caravan and marine interiors, some desk lamps, and also used in retail shop display cabinets. High lumen level, available in cool and warm white.

Specifications	Both
Fitting	MR11
Input power	12VAC/DC, 2.2W
Brightness	230 lumens
Beam angle	120°
LED source	15x 2835 SMD LEDs
Dimensions	34(Dia.) x 29(D)mm



⬆	Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+	
	230	Cool white	ZD-0650	\$14.95	\$13.45	\$11.95
	230	Warm white	ZD-0652	\$14.95	\$13.45	\$11.95

G4 LED REPLACEMENT LAMPS - 12VAC/DC

G4 LED REPLACEMENT
LIGHT, 120° - 12VAC/DC

An easy replacement for a G4 2-pin type halogen globe that uses significantly less power, and lasts a much longer. Great for benchtop lighting, reading lamps, and a whole host of other applications.

Specifications	Both
Fitting	G4
Power	2.2W, 12VAC/DC
Light output	230 lumens
Beam angle	120°
LED source	15x 2835 SMD LEDs
Dimensions	27mm Dia.



⬆	Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+	
	230	Cool white	ZD-0655	\$13.95	\$12.35	\$10.95
	230	Warm white	ZD-0657	\$13.95	\$12.35	\$10.95

G4 LED WATERPROOF GLOBES - 12VDC

Low wattage replacement G4 LED lamps suitable for use in recreational vehicles. Completely encapsulated in resin, making them waterproof.

Specifications	ZD-0564	ZD-0566
Colour	Warm white	Cool white
Power	1.5W	1.5W
Light output	100 lumens	110 lumens
Input voltage	12VAC/DC	12VAC/DC
Colour temperature	3000K	6500K
Dimensions	35(L) x 9.5mm	35(L) x 9.5mm



⬆	Lumens		Cat.	Qty 1+	Qty 3+	Qty 6+
	100	Warm White	ZD-0564	\$14.95	\$13.35	\$11.70
	110	Cool White	ZD-0566	\$14.95	\$13.35	\$11.70

G4 LED REPLACEMENT LIGHTS, 360° - 12VAC/DC

When a full 360 degree light output is required from your G4 type globe, such as a garden light or lamp, these are the LED solution to save you power.

Specifications	Both
Fitting	G4
Power	2W, 12VAC/DC
Light output	250 lumens
Beam angle	120°
LED source	18x 2835 SMD LEDs
Dimensions	27mm Dia.



↑	Lumens		Cat.	Qty 1+	Qty 3+	Qty 6+
	250	Cool white	ZD-0654	\$14.95	\$13.45	\$11.95
	250	Warm white	ZD-0656	\$14.95	\$13.45	\$11.95

LED REPLACEMENT GLOBES

MAINS LED GLOBES 240VAC

240V MAINS LED LIGHT GLOBES

A range of mains LED light globes that are a true replacement for traditional lighting, offering brilliant lumen performance with wide, evenly spread light. Unlike many other types on the market with only 180° light angle, these lights have a truly even light output across a 270° output angle, making them better than traditional light globes in many cases.

- Available in warm white, natural white and cool white colours
- Bayonet or screw cap
- 5W, 8W or 10W
- All models having a colour rendering index above 80
- All models are also dimmable with standard leading or trailing edge light dimmers, or you can use the Viribright dimmer switch, PS-4084.
- Typical payback period is just 9-12 months - see our online calculator to see how much you can save!



SL-2210



SL-2214



SL-2235

VIRIBRIGHT
The bright side of light

NEW LOW PRICE

MORE INFO WEB

2 YEAR WARRANTY

Power	Lumens	Colour	Base	Beam Spread	Colour Temp.	Equivalent Traditional Globe	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
5W	400	Warm white	Bayonet	270°	2800K	40W	SL-2210	\$12.95	\$11.35	\$10.35
5W	400	Warm white	Screw	270°	2800K	40W	SL-2211	\$12.95	\$11.35	\$10.35
5W	450	Natural white	Bayonet	270°	4000K	40W	SL-2212	\$12.95	\$11.35	\$10.35
5W	450	Natural white	Screw	270°	4000K	40W	SL-2213	\$12.95	\$11.35	\$10.35
5W	450	Cool white	Bayonet	270°	6000K	40W	SL-2208	\$12.95	\$11.35	\$10.35
5W	450	Cool white	Screw	270°	6000K	40W	SL-2209	\$12.95	\$11.35	\$10.35
8W	500	Warm white	Bayonet	270°	2800K	60W	SL-2230	\$14.95	\$13.35	\$11.70
8W	500	Warm white	Screw	270°	2800K	60W	SL-2231	\$14.95	\$13.35	\$11.70
8W	650	Natural white	Bayonet	270°	4000K	60W	SL-2232	\$14.95	\$13.35	\$11.70
8W	650	Natural white	Screw	270°	4000K	60W	SL-2233	\$14.95	\$13.35	\$11.70
8W	650	Cool white	Bayonet	270°	6000K	60W	SL-2234	\$14.95	\$13.35	\$11.70
8W	650	Cool white	Screw	270°	6000K	60W	SL-2235	\$14.95	\$13.35	\$11.70
10W	820	Warm white	Bayonet	270°	2800K	75W	SL-2214	\$19.95	\$17.70	\$15.70
10W	900	Natural white	Bayonet	270°	4000K	75W	SL-2216	\$19.95	\$17.70	\$15.70
10W	900	Cool white	Bayonet	270°	6000K	75W	SL-2206	\$19.95	\$17.70	\$15.70
10W	900	Cool white	Screw	270°	6000K	75W	SL-2207	\$19.95	\$17.70	\$15.70

18W PAR38 OUTDOOR LED SPOTLIGHT GLOBES

Finally an energy efficient alternative to power hungry outdoor halogen spotlights, that doesn't take several minutes to "warm up" like a compact fluoro! Using just 18W of power, and producing over 1,300 lumens of light, these globes are a DIRECT replacement for the 150W halogen globes found in outdoor spotlights and driveway sensor lights.

- IP55 rated
- Available in warm, natural and cool white colour temperatures
- E27 Edison screw base.

VIRIBRIGHT
The bright side of light



NEW LOW PRICE

2 YEAR WARRANTY

Power	Lumens	Colour	Base	Beam Spread	Colour Temp.	Equivalent Traditional Globe	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
18W	1300	Warm white	Screw	90°	2800K	150W	SL-2225	\$39.95	\$35.90	\$31.90
18W	1500	Natural white	Screw	90°	4000K	150W	SL-2227	\$39.95	\$35.90	\$31.90
18W	1500	Cool white	Screw	90°	6000K	150W	SL-2229	\$39.95	\$35.90	\$31.90

8.5W LED REPLACEMENT FLUORO TUBES & LAMPS

T8 LED FLUORO REPLACEMENT TUBES

Power consumption is more and more a focus these days with power bills ever increasing and with traditional T8 type fluoro tubes being one of the most common lighting sources in use, they are an easy target for reducing power bills both domestically and commercially. These LED T8 fluoro replacement tubes offer equivalent light output to a typical T8 fluorescent tube, but with half the power consumption, none of the annoying flicker, and often an increase in life expectancy. The upgrade is so simple with no rewiring required in most cases; just remove the old fluoro tube and starter, and replace with the Viribright LED tube and starter (fuse). These are a "single side" powered tube that do not have a metal back, so are completely safe (unlike some tubes) and even have Australian electrical safety approval certificates.

- Available in 2 foot and 4 foot lengths, in either natural white or cool white colour.

Note: Not available in New Zealand

Specifications	SL-2285	SL-2286	SL-2282	SL-2283
Power	10W	10W	20W	20W
Lumens	900	100	1800	2000
Colour	Natural White	Cool White	Natural White	Cool White
Base	G13	G13	G13	G13
Colour temp.	4000K	6000K	4000K	6000K
Lifespan	40,000 hours	40,000 hours	40,000 hours	40,000 hours
Beam spread	140 degrees	140 degrees	140 degrees	140 degrees
Equivalent traditional globe	18W T8 fluoro	18W T8 fluoro	36W T8 fluoro	36W T8 fluoro



* NOTE: Not compatible with electronic ballasts. Light fitting needs re-wiring if fitted with an electronic ballast.

For volume enquiries, please contact our Techstore for a quotation. Wholesale enquiries also welcome.

VIRIBRIGHT
The bright side of light

1 YEAR WARRANTY

↑	Watts	Colour	Length(mm)	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	10W	Natural White	600	SL-2285	\$39.95	\$35.90	\$31.90
	10W	Cool White	600	SL-2286	\$39.95	\$35.90	\$31.90
	20W	Natural White	1200	SL-2282	\$64.95	\$58.50	\$51.95
	20W	Cool White	1200	SL-2283	\$64.95	\$58.50	\$51.95

2,600 LUMENS 240V IP65 180 LED LIGHT FIXTURE

This 240V LED light fixture is an ideal replacement for a traditional fluorescent light. It is energy efficient and produces a very bright 2,600 lumens. It is weatherproof and dustproof with its IP65 rating so it is suitable for both indoor and outdoor applications. Comes with mounting bracket and a 1.8m length of lead with mains plug.

Specifications	
LED type	180 x SMD2835 Everlight
Driver efficiency	>0.88
CRI	>80
Colour temperature	5500K Cool White
Brightness	2,600 lumen
IP rating	IP65
Power	30W
LED lifespan	50,000 hours
Dimensions	675(L) x 135(W) x 93(D)mm



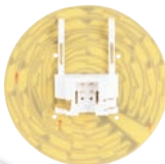
NEW 2015

↑	Power	Lumens	Colour	Colour Temp.	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	30W	2600	Cool White	5500K	ST-3945	\$109.00	\$89.95	\$79.95

LED REPLACEMENT LAMPS FOR CARAVANS

LED REPLACEMENT LAMP FOR 2D FLUOROS IN CARAVANS

One of the most common lights used in caravans up until quite recently, is the 16W 2D fluoro. The problem with these is not only do they draw a lot of power for the light they produce, but they also blow very frequently, take a long time to "warm up", and they aren't very pleasant on the eye. These LED replacement lamps solve all that! The circular shape metal core PCB is backed with the same moulding as a normal 2D fluoro, so it fits into the same light socket - all you have to do is bypass the fluoro ballast and supply the lamp with 12VDC directly. No need to carry spare globes as the LED lamp is impervious to vibrations, and the LEDs are rated to last over 50,000 hours. Available in warm white (ZD-0672) or cool white (ZD-0670)



Specifications	
Input voltage	12VDC
Power	9W
Lumens	900
Beam	180°
LED type	60x2835 SMD
Dimensions	150(Dia.)mm



	Cat.	Qty 1+	Qty 5+	Qty 10+
Cool White	ZD-0670	\$29.95	\$26.95	\$23.70
Warm White	ZD-0672	\$29.95	\$26.95	\$23.70

FLUORESCENT ADAPTORS

FLUORESCENT TUBE ADAPTORS T5-T8



Easily convert traditional T8 fluorescent lighting to more energy efficient T5 series tubes using these tube adaptor sets. T5 tubes output the same light level as standard T8 tubes while consuming up to 40% less power. By comparison, LED replacements for fluorescent lights use similar power, and/or produce less light, and cost SEVERAL times more.

While many LED lighting options are available, we have specifically rejected LED fluoro replacements and chosen to sell these converters due to price, convenience and safety. Many LED tubes are known fail prematurely, with the electronics being poor quality, and the LEDs themselves being irregular in colour. Currently there are no mandatory electrical safety requirements for LED fluoro tube replacements and many common LED tube varieties pose a real electrocution hazard! By contrast T5 tubes are reliable and readily available in a brand name at a low cost, and are very safe; with these T8-T5 adaptors being approved by electrical safety standards. Lets not also forget the frightfully high cost of LED fluoro replacement tubes!

With T8 tubes commonly found in large area lighting systems for offices, schools, small businesses and warehouses the savings achieved using these adaptors adds up very quickly.

Installation couldn't be more simple - just remove the old T8 tube and starter, replace with the supplied starter-fuse, attach the two adaptor ends to your new T5 tube, install as per usual, and enjoy the power savings!

NOTE: Not suitable in T8 fittings with electronic ballasts.

Two models available:

SL-2746 for replacing 20W 590mm (2ft) T8 tubes with 14W T5 tubes
SL-2748 for replacing 40W 1200mm (4ft) T8 tubes with 28W T5 tubes

	Cat.	Qty 1+
Replaces 20W Tubes	SL-2746	\$7.95
Replaces 40W Tubes	SL-2748	\$7.95



TECH TALK!

LED INFORMATION

Power supply requirements for LED lamps or lighting modules, such as our MR16 LED downlight replacement globes, can vary considerably and it is essential that a suitable power supply is used. Switchmode transformers, or "electronic transformers" that are designed to run halogen lights, should not be used with LED lighting modules or lamps unless they are specifically certified to do so. LED lamps are compatible with all types of magnetic (linear) transformers, but not all types of switchmode transformers. Most halogen lamp switchmode transformers require a minimum load to function correctly & output a high frequency pulse train based on the load requirements.

GLOBE HOLDERS

E14 12VDC SOCKET - (SES)

Suits E14 small Edison screw fluoro globes. Rated for 12VDC, suits compact fluoro SL-2850

- Base size: 40(Dia) x 42(H)mm
- Mounting holes 30mm apart.

Not suitable for 240V



	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-4072	\$4.95	\$4.45	\$3.90

GLOBE HOLDER

Standard MES globe holder (Torch globes).

- Suits SL-2654/6



	Cat.	Qty 1+	Qty 10+	Qty 50+
	SL-2658	\$0.95	\$0.85	\$0.75

TECH TALK!

MES means 'Miniature Edison Screw'

BAKELITE GLOBE HOLDER

High quality MES globe holder with a round bakelite base.

- Wires are attached to the socket by screws.
- No soldering required.
- Holder can easily be screwed to a base plate.
- Diameter 33mm
- Height 19mm.
- Suits SL-2654/6
- Ideal as a simple pilot lamp



	Cat.	Qty 1+	Qty 10+	Qty 50+
	SL-2659	\$2.95	\$2.60	\$2.30

BASE

Base to suit both 35mm and 50mm lamps.

- Size 17(Dia.) x 9(H)mm.
- Cable length 120mm.
- Rating 100W 25V.



	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2735	\$4.95	\$4.45	\$3.90

50MM HALOGEN DOWNLIGHT HOLDER

Install your own halogen lamps in the ceiling with this holder. Simply drill a hole and this fitting pushes in and is held with clips. The halogen globe then pushes into the holder.

- Colour is white, complete with lamp base.
- For 51mm. Approx cutout is 60-65mm.
- Dimensions - total width at front 75mm. Depth 55mm.



	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2738	\$6.95	\$6.25	\$5.50

BUY IT ON THE WEB...

Shop for all these Jaycar Electronics products online at our website - and check out our latest products and special offers!



REPLACEMENT GLOBES

HALOGEN GLOBES

6V 55W HALOGEN GLOBE

Replacement globe to suit our ST-3300 halogen spotlights.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-3221	\$5.95	\$5.25	\$4.75

12V 5W HALOGEN GLOBE

- 12V @ 5W.
- 4mm pin spacing.
- 8mm pin length
- Total length: 30mm
- Bulb dia: 8mm
- Pkt 2



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	SL-3216	\$5.95	\$5.25	\$4.75

12V 10W HALOGEN GLOBE

Halogen globe for illuminated fogger.

- 12V, 10 watts
- 4mm pin spacing.
- Pin length: 8mm
- Total length: 30mm.
- Bulb dia: 8mm
- Pkt 2



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	SL-3217	\$5.95	\$5.25	\$4.75

12V 50W HALOGEN GLOBE

Same as 100W unit below, but this one is 50W.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
12V 50W	SL-2726	\$5.95	\$5.25	\$4.75

12V 100W HALOGEN GLOBE

These are used in hand held spotlights.

- Fitting and contact is by 2 pins which are 6mm apart.
- Length including pins is 40mm.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
12V 100W	SL-2724	\$4.95	\$4.45	\$3.90

12V JC HALOGEN GLOBE

2 pin halogen globes.

- As used in some models of our garden lighting.
- Fitting and contact is by 2 pins, 22mm long, pin spacing: 3mm, 8mm dia, 8mm pins.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
12V 20W	SL-2722	\$3.95	\$3.45	\$3.15

INCANDESCENT GLOBES

INCANDESCENT LIGHT GLOBES

In its hasty ban of standard filament type light globes with so-called energy saving ones, the government forgot about dimmability. Standard energy saving globes won't work with light dimmers! The globe shown below is legal and provides the standard resistive load for light dimmers. It also provides a much softer light.

- Edison screw
- 70W is 100W equivalent
- Most importantly it behaves just the way standard globes did with dimmers
- Sizes for most domestic uses



NEW LOW PRICE

↑	Cat.	Qty 1+
Pack of 2	SL-2797	\$1.50

GLOBES

ILLUMINATED DOORBELL GLOBE

Replacement globe for our doorbell SP-0782 switch, can be used as a replacement for other brand doorbells.

- Length 27mm.
- Globe is 12V, but will work on lower voltages.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2720	\$1.95	\$1.75	\$1.55

12V SWITCH GLOBE

As used in our illuminated pushbutton switches Cat. SP-0742/50/52/53



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2635	\$5.95	\$5.25	\$4.75

14V CAR ALARM SWITCH REPLACEMENT GLOBES

Replacement globes for flashing switches / bezels for car alarms.

- BI - pin
- T1
- 2.54 lead spacing
- 14 volt.



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
	SL-2636	\$3.85	\$3.45	\$2.95

MINI LAMPS



A large range of various sizes and voltages of mini lamps. • Supplied with wiring cable pre connected.

Large Size	Volts	Cat.	Wire Colour
Globe size - 4(Ø) x 10mm	1.5	SL-2670	White
PVC lead length - 150mm	3	SL-2671	Red
Current - 0.1A	6	SL-2673	Blue
	9	SL-2674	Green
	12	SL-2675	Yellow
Small Size	Volts	Cat.	Wire Colour
Globe size - 3(Ø) x 7mm	1.5	SL-2680	White
PVC lead length - 100mm	3	SL-2681	Red
Current - 0.1A	6	SL-2683	Blue
	9	SL-2684	Green
Qty prices for one type only	12	SL-2685	Yellow

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	All Types Each	\$1.30	\$1.15	\$1.01

LILLIPUT GLOBES

- Total length 17mm.
- Width 4.5mm.
- Glass length 8mm.



↑	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
6.3V	200mA	SL-2650	\$0.95	\$0.85	\$0.75
12V	120mA	SL-2652	\$0.95	\$0.85	\$0.75

MINIATURE EDISON SCREW GLOBES

- Total length 27mm.
- Width 9mm.
- Glass length 14mm.



↑	Current	Cat.	Qty 1+	Qty 10+	Qty 25+
6.3V	250mA	SL-2654	\$0.85	\$0.75	\$0.65
12V	100mA	SL-2656	\$0.85	\$0.75	\$0.65

TECH TALK!

HANDLING HALOGEN GLOBES

Due to the high temperature of the halogen globes the glass envelope can crack unless it is very clean. If you leave grease or fingerprints on the globe, clean the glass with methylated spirits (preferably) before using.

NEONS

90V NE2 NEON



Would you believe it? After about 100 years of orangey-red neons we now can get blue and green ones! You'll buy one out of curiosity!

- Strike voltage: 82V
- Needs 270k resistor in series for 240V operation.

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Orange/Red	SL-2690	\$1.25	\$1.10	\$1.00
Blue	SL-2695	\$1.25	\$1.10	\$1.00
Green	SL-2696	\$1.25	\$1.10	\$1.00

TORCH GLOBES

Krypton globes give up to 70% more light output compared to standard globes.

FLANGE TYPE KRYPTON TORCH GLOBES



2.2V 470mA				
• Suitable for 2 x AA batteries				Cat. SL-3200
2.4V 520mA				
• Suitable for 2 x C batteries				Cat. SL-3202
2.4V 700mA				
• Suitable for 2 x D batteries				Cat. SL-3204
2.4V 700mA				
• Suitable for 3 x D batteries				Cat. SL-3206
4.8V 750mA				
• Suitable for 4 x D batteries / Lantern				Cat. SL-3208

↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	All Types	\$2.95	\$2.60	\$2.30

2.5V KRYPTON TORCH GLOBE - MES

- 300mA
- Suitable for 2 x 1.5V batteries
- Miniature Edison Screw



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	SL-3210	\$2.65	\$2.30	\$2.07

4.8V KRYPTON TORCH GLOBE - MES

- 300mA
- Miniature Edison Screw



↑	Cat.	Qty 1+	Qty 10+	Qty 25+
Each	SL-3211	\$1.95	\$1.75	\$1.55

DO A FRIEND A FAVOUR

If you have a technical friend or someone who may be just interested in some of the products we stock, simply mail or email his or her address to:

Catalogue Department
Jaycar Electronics:
PO Box 7172
Silverwater, NSW 1811
or email
to catalogue@jaycar.com

FLEXIBLE SOLAR PANELS

ULTRA-LIGHT FLEXIBLE FOLD-UP CANVAS SOLAR PANELS WITH CIGS TECHNOLOGY

An affordable range of ultra-lightweight solar panels that fold-up into a very small lightweight package while you travel, and flexible to avoid accidental breakage. Each use high grade flexible thin-film CIGS (Copper Indium Gallium Selenide) solar cells incorporated into a tough canvas fabric blanket, which can be folded up into a small package and neatly stored in the back of your vehicle. The construction is designed to withstand the harsh outback and the abuse of life on the road, so standing on them, driving over them, or bending them isn't going to kill them, and nor will dragging them through sand/mud/dirt. Just unfold them, place in direct sunlight, and enjoy the free power. An external solar charge controller is required to properly charge a 12V battery (Powertech MP-3720 is recommended).

- Flexible design for maximum durability
- 5m output lead
- Super compact and light weight
- High efficiency cells (12.5%), better than amorphous
- Tough canvas material construction
- 15 year output warranty, 2 year construction
- CIGS (copper indium gallium selenide) flexible solar cells

Specifications	ZM-9160	ZM-9162	ZM-9164
Power (max)	36W	72W	108W
Voltage (max power)	19.8V	19.8V	19.8V
Current (max power)	1.82A	3.63A	5.45A
Open circuit voltage	22.75V	23V	23V
Short circuit current	2.09A	4.1A	6.27A
Solar cell type	Thin Film Flexible CIGS	Thin Film Flexible CIGS	Thin Film Flexible CIGS
Cell efficiency	12.50%	12.50%	12.50%
Weight	1kg	1.8kg	2.7kg
Dimension (folded)	320 x 215 x 50mm	375 x 340 x 50mm	445 x 370 x 45mm
Dimension (unfolded)	780 x 630 x 1.5mm	1120 x 725 x 1.5mm	1310 x 890 x 1.5mm

↑ Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
12V	36W	ZM-9160	\$539.00	\$509.00	\$485.00
12V	72W	ZM-9162	\$949.00	\$899.00	\$855.00
12V	108W	ZM-9164	\$1399.00	\$1329.00	\$1259.00

TECH TALK!

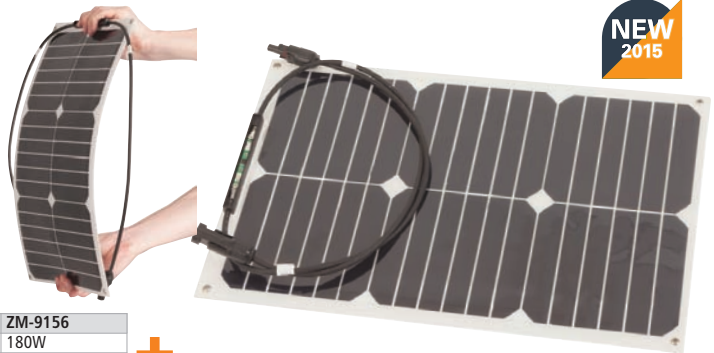
APPLICATION GUIDE FOR SEMI-FLEXIBLE SOLAR PANELS

Our semi-flexible solar panels are an excellent option for boats, campervans, caravans or camping power setups, as they are a lot lighter and less bulky than their standard solar panel equivalent (only 3mm thick versus 27-35mm thick). Their main structure is a sheet of aluminium alloy material that is flexible, allowing you to bend the panel slightly to follow the curves of your mounting surface for a streamline installation. They are also supplied with a set of nylon "threaded inserts" (aka Nutserts), which are a very handy way of providing a threaded hole in your mounting surface.

SEMI-FLEXIBLE 12V SOLAR PANELS

These monocrystalline solar panels can be easily mounted on the curved surfaces of your boat deck or caravan to charge on-board batteries. The flexibility of the solar cells is limited by the plastic base but will easily bend on the long axis to accommodate a yacht deck or RV roof. It is slightly flexible on the short axis. Best of all, these units do not have a heavy rigid frame and are therefore light, and easy to stow away when you travel. The solar cells are implanted in very distinctive and highly resilient polymers that give durability. The flexible non-glass area of the solar panel is tough enough to walk on.

We recommend that you add a solar charge regulator to charge the batteries more effectively.



Specifications:	ZM-9150	ZM-9152	ZM-9154	ZM-9156
Max Power: (Pmax)	18W	40W	100W	180W
Rated voltage	12V	12V	12V	12V
Open Circuit Voltage (Voc)	23.70V	23.60V	21.70V	20.30V
Short Circuit Current (Isc)	1.03A	2.05A	6.10A	11.57A
Max Power Voltage (Vmp)	19.4V	19.50V	17.70V	16.80V
Max Power Current (Imp)	0.93A	2.33A	5.70A	10.71A
Module Efficiency	20.50%	22.20%	21.30%	20%
Cable length	900mm	900mm	900mm	900mm
Dimensions	434(L) x 277(W) x 3(D)mm	535(L) x 415(W) x 3(D)mm	1050(L) x 540(W) x 3(D)mm	1305(L) x 796(W) x 3(D)mm
Weight	0.29kg	0.9kg	2kg	3kg

↑ Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
12V	18W	ZM-9150	\$94.95	\$89.95	\$85.50
12V	40W	ZM-9152	\$199.00	\$186.95	\$178.95
12V	100W	ZM-9154	\$399.00	\$379.00	\$359.00
12V	180W	ZM-9156	\$649.00	\$615.00	\$585.00

CHECK OUT OUR RECREATIONAL SOLAR PACKAGES ON PAGES 286 IN THE AUTO - OUTDOORS SECTION



LET'S FIND EVERYTHING YOU NEED!

SOLAR SUCCESS - GETTING IT RIGHT EVERY TIME

A complete guide for home and remote property systems, this book is about using solar energy to reduce the fossil fuel generated electricity that produces our carbon footprint. A pragmatic no-nonsense approach written by acclaimed Australian author Collyn Rivers, who walks the walk by showing his self-installed solar system on his 100% solar powered 10-acre property in the Kimberley.

- Spiral bound softcover
- 112 pages, 300 x 210mm

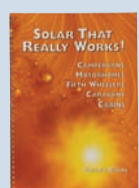


↑	Cat.	Qty 1+
	BE-1537	\$47.50

SOLAR THAT REALLY WORKS

The sun God Ra has been raining down free energy for about 4.5 billion years and only in recent years have humans developed the technology to capture it. This is an informative book that takes a practical look at the do's and don'ts of solar installation from caravans to fishing lodges. Contained within are detailed descriptions of working solar systems with illustrations. You won't be left asking questions as the author has everything covered.

- Softcover, 82 pages, 290 x 210mm



↑	Cat.	Qty 1+
	BE-1535	\$42.50

BOOKS ON ALTERNATIVE ENERGIES

BUILD YOUR OWN DIRECT CHARGING PLANT

If you use a Deep Cycle battery to power a remote or mobile home you need an efficient charging plant. This book takes you through all the elements pertaining to building your own Direct Charging Plant including, basic to advanced battery charging, alternators, horsepower vs watts output calculations, power input, efficient regulation and more with full colour pictures and easy to read text.

• Softcover, 57 pages, Size: 254 x 183mm

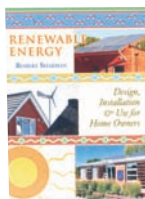


↑	Cat.	Qty 1+
	BE-1530	\$24.95

RENEWABLE ENERGY - DESIGN, INSTALLATION & USE

Renewable energy is expanding at an unprecedented rate. Solar panels are now commonplace and can be seen on suburban rooftops, factories and shops. Wind farms are a growth industry and small scale wind generators are commonly available, not to mention biofuels and micro hydro systems. Regardless of whether you live in the city, on the land or in a motorhome this book explains renewable energy in an easy-to-read and understand format and covers everything from basic electrical concepts through to system design.

• Softcover, 201 pages, 280 x 200mm



↑	Cat.	Qty 1+
	BE-1538	\$38.95

MOTORHOME ELECTRICS

A comprehensive text written primarily for owners, designers and builders of caravans, campervans and motorhomes who face unique power demands and challenges that most auto electricians are ill-equipped to properly address. This book spans the gap between auto electrical and alternative energy disciplines, providing thorough coverage of component definitions and applications, as well as thoughtful and straight-shooting advice on common electrical problems. An engaging read for those with a general understanding on the subject, it also features more technical in-depth sections to assist trade electricians. Written by acclaimed Australian author and field expert Collyn Rivers, this is an essential reference for all caravan & motorhome enthusiasts.

• Softcover, 102 pages. 300 x 210mm.



↑	Cat.	Qty 1+
	BE-1536	\$42.50

SOLAR PANELS - AMORPHOUS

In the past, amorphous solar panels have been labelled as the cheap alternative for an installation where long service life is not important - however that is about to change. Recent years have seen vast improvements in thin-film solar technology, especially with amorphous silicon based solar panels, and we are now bringing those improvements to you with our updated range of amorphous solar panels. Whilst these panels might look the same as any other amorphous panel, the difference lies within the visual exterior. On top of the features our amorphous panels have always had, they now boast dual-junction amorphous silicon with laser edged isolation construction. What does that

SO WHY WOULD YOU CHOOSE AMORPHOUS PANELS?

Solar Panel Type	Size per Watt	Output under cloudy conditions	Power Decrease due to Heat
Amorphous	Bigger (2-3 times)	Yes - and for longer hours each day	-0.19% / °C (less power decrease)
Crystalline	Smaller	No - output drops significantly in cloudy conditions	-0.47% / °C

WHAT'S THE CATCH?

If you think that amorphous is too good to be true take a close look at their size. The big downside to amorphous is that to get the same power as poly or monocrystalline you need 2-3 times the surface area. This may or may not be a problem. On a yacht, yes, but on a farm probably no.

1 WATT TO 4 WATT PANELS

Specification	ZM-9020	ZM-9024	ZM-9026
Maximum power	1W	2W	4W
Rated voltage	6V	12V	12V
Voltage (@ Pmax)	7V	17.5V	17.5V
Current (@ Pmax)	143mA	115mA	286mA
Short circuit current	150mA	150mA	450mA
Open circuit voltage	11V	21V	21V
Dimensions	162 x 162 x 22mm	160 x 313 x 22mm	330 x 330 x 22mm
Weight	0.65kg	1.0kg	2.32kg
Warranty	5 year	5 year	5 year

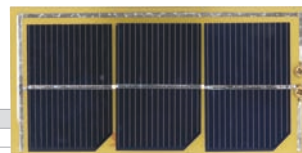
↑	Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
	6V	1W	ZM-9020	\$19.95	\$18.70	\$17.70
	12V	2W	ZM-9024	\$29.95	\$28.45	\$26.90
	12V	4W	ZM-9026	\$49.95	\$47.45	\$44.90

SOLAR MODULE

HOBBY SOLAR MODULE

Ideal for powering solar projects, hobbies, model solar cars and educational applications. 3 cells per module, rated at 1.5V. Total 0.5V each cell.

Specifications	
Open circuit voltage	1.5V
Short circuit current	500mA
Dimensions	148(L) x 74(W)mm
Weight	33g



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	ZM-9012	\$19.95	\$18.70	\$17.70

SOLAR WATER PUMPS

Run your outdoor aquarium, garden pond or water feature from the sun, eliminating the need for wiring or the safety aspects of electricity near water. Each comes with its own solar panel, cable and pump assembly ready to go and has some electronic smarts built in to regulate the delivery of power during cloudy periods.

0.9W SOLAR WATER PUMP

Specifications	ZM-9200
Operating Voltage	7V
Power Consumption	0.9W
Flow Rate	140 litres/hour
Outlet Size	8mm
Cable Length	2m
Dimensions	
Solar Panel	188(L) x 155(W) x 25(H)mm
Pump Assembly:	42(L) x 39(W) x 28(H)mm



Pumps & Solar Panels not to scale

2.4W SOLAR WATER PUMP

Specifications	ZM-9202
Operating Voltage	12V
Power Consumption	2.4W
Flow Rate	200 litres/hour
Outlet Size	8mm
Cable Length	2m
Dimensions	
Solar Panel	308(L) x 166(W) x 25(H)mm
Pump Assembly	42(L) x 39(W) x 28(H)mm



Pumps & Solar Panels not to scale



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
0.9W	ZM-9200	\$49.95	\$44.90	\$39.90
2.4W	ZM-9202	\$99.95	\$89.95	\$79.95

mean? It means that along with a small improvement in output efficiency they also have big improvements in the life expectancy of the panel - they will maintain above 80% of their original rated power for 20 years. That's about as good as a polycrystalline or monocrystalline solar panel.

Beware of cheaper amorphous panels which don't offer these features, as their performance will surely degrade much faster and they will usually perform below their rated specification.



INCLUDES PROTECTIVE PLASTIC CORNERS AND BATTERY CLIPS



SOLAR PANELS - MONOCRYSTALLINE

5 WATT TO 200 WATT PANELS

These quality Powertech monocrystalline solar panels offer you the same robust construction and performance as the leading brand names, whilst also offering a nice cost saving. Despite being manufactured in China, they are definitely suitable for harsh Australian conditions.

Our Powertech solar panels are among the best to come out of Asia, and we are not alone in our beliefs! Our supplier has been producing solar panels for the large European market for several years, including manufacturing the panels for a 100kW solar plant in Greece & a 300kW solar plant in Spain.

When we visited their factory we were amazed at the high level of quality control. Each individual cell is tested and measured before assembling the panel, and then each and every panel is tested and measured to IEC standards before shipping them out. Unlike most of the Asian solar panel

5 WATT TO 40 WATT PANELS

Cat.	ZM-9091	ZM-9093	ZM-9094	ZM-9095
Maximum power	5W	10W	20W	40W
Rated voltage	12V	12V	12V	12V
Open circuit voltage	21V	21.5V	21.5V	21.4V
Short circuit current	380mA	680mA	1.3A	2.56A
Voltage at max power	16.8V	17V	17.2V	17.1V
Current at max power	300mA	590mA	1.17A	2.34A
Dimensions	295 x 255 x 23mm	396 x 289 x 23mm	639 x 294 x 23mm	545 x 645 x 23mm
Weight	0.8kg	1.4kg	2.4kg	4.0kg

↑ Voltage	Wattage	Cat.	Qty 1+	Qty 2+	Qty 4+
12V	5W	ZM-9091	\$22.95	\$21.70	\$20.35
12V	10W	ZM-9093	\$35.95	\$32.95	\$31.45
12V	20W	ZM-9094	\$69.95	\$66.50	\$62.95
12V	40W	ZM-9095	\$129.00	\$122.95	\$115.95

80 WATT TO 200 WATT PANELS

Cat.	ZM-9097	ZM-9086	ZM-9085	ZM-9087	ZM-9088
Maximum power	80W	90W	120W	145W	200W
Rated voltage	12V	12V	12V	12V	24V
Open circuit voltage	21.8V	22.2V	17.2V	18V	45.3V
Short circuit current	5.23A	5.39A	6.68A	8.06A	6.15A
Voltage at max power	17.6V	18V	21.6V	22.8V	37.8V
Current at max power	4.55A	5A	7.75A	8.96A	5.31A
Dimensions	1200 x 540 x 28mm	1200 x 540 x 28mm	1190 x 660 x 35mm	1250 x 808 x 35mm	1580 x 808 x 35mm
Weight	8.2kg	8.2kg	11.5kg	12kg	15.5kg

NOTE: Our ZM-9088 (200W) panels are listed as approved modules by the Clean Energy Council under the factory brands Zhejiang Sopray or Talesun, models SR-200 or TP572M-200 respectively. The Powertech brand is used for marketing purposes only.

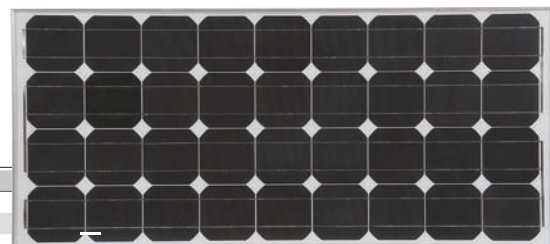
*Our 200 watt panel (ZM-9088) has the required IEC certificates for the Australian Solar Rebate Scheme

TECH TALK!

The larger (80W and above) panels are fitted with a TUV approved waterproof junction box with cable glands. They have short UV stabilised output cables and bypass diodes included.



↑ Voltage	Wattage	Cat.	Qty 1+	Qty 4+
12V	80W	ZM-9097	\$239.00	\$219.00
12V	90W	ZM-9086	\$249.00	\$239.00
12V	120W	ZM-9085	\$329.00	\$309.00
12V	145W	ZM-9087	\$399.00	\$379.00
24V	200W	ZM-9088 *	\$469.00	\$449.00



LET'S FIND EVERYTHING YOU NEED!

UV STABILISED SOLAR SYSTEM POWER CABLE - IP RATED

Very tough cable, specifically for the rigours of outdoor use in solar panel installations. Dust, age and UV resistant, tinned copper conductors to minimise corrosion. Use with our PV connectors for complete environmental protection.

Two types available:	Cat. No	Dia(mm)	Current(A)
	WH-3121	4mm sq.	58A
	WH-3122	6mm sq.	76A
Conductor material:	Tin plate copper, Class 5		
Insulation material:	XLPO		
Rated voltage:	1000VDC		
Temperature range:	-40 to + 125°C		
TUV certification:	2 PFG 1161/01.06		

TUV CERTIFIED



100 METRE ROLL

↑	Cat.	1+ Metre	1+ Rolls	5+ Rolls
4.0mm²	WH-3121	\$4.20	\$354.00	\$319.00
6.0mm²	WH-3122	\$7.20	\$599.00	\$545.00

POWERTECH

suppliers, our factory actually performs the silicon doping process in-house, which provides further quality control over the end product as they are in control of the whole process from start to finish.



Each panel is also uniquely identified with a barcode serial number for traceability and warranty purposes, and the test results for each panel are logged with that serial number - so you can rest assured our factory means to ensure they supply a quality product and will stand by their claims of performance with our 25 year limited warranty.

We will not be undersold on quality panels!



25 YEAR LIMITED WARRANTY

All Powertech monocrystalline solar panels are covered by a 25 year limited warranty. This warranty covers the panels for defects in construction and manufacturing for a period of 5 years, and warrants that the electrical output will remain above 80% of its original rated output for a period of 25 years.

SOLID WIRE GROUNDING ASSEMBLIES

If your aluminium-framed solar panels and related products require grounding for safety reasons, we have a surplus buy of genuine Tyco Electronics Connectivity branded parts. These parts are available ONLINE ONLY. For full specifications and installation instructions visit our website. Here are two solutions:



MORE INFO WEB

NEW 2015

AVAILABLE ONLINE ONLY

GROUNDING CLIP ASSEMBLIES

Both for 10-12 AWG cable:

SolarLok SolKlip® Ground Clip with Screw	SZ-3010
SolarLok SolKlip® Ground Clip with Nut	SZ-3011



GROUNDING BOLT ASSEMBLY

For use with 6-12 AWG cable

SolarLok SolKlip® Grounding Bolt	SZ-3012
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↑	Cat.	Qty 1+
SolarLok SolKlip® Ground Clip with Screw	SZ-3010	\$3.95
SolarLok SolKlip® Ground Clip with Nut	SZ-3011	\$3.95
SolarLok SolKlip® Grounding Bolt	SZ-3012	\$9.95

Even better pricing for Trade/Bulk users!

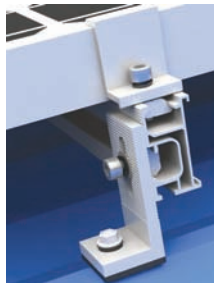
SOLAR PANEL MOUNTING HARDWARE

ECOTECH PROFESSIONAL SOLAR MOUNTING HARDWARE

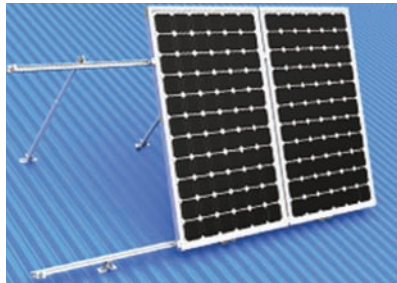
A universal and code compliant mounting system for attaching solar panels to the roof of your property. Designed to be used with either tiled or tin roofs, with any slope from 0-60° (either flat or pitched), and fully cyclone rated even for wind region D. The easy insertion modules mean that you don't have to slide each attachment along the rail to get it in place, they slot in quite easily at the very spot you want to attach them. For use with 35mm thick modules, a full range of components are available.

- Cyclone proof to Wind Region D (installation guide must be strictly adhered to)
- Vertical or horizontal panel mounting
- Suits any solar panel width, but optimised for 800-825mm width
- Suitable for aluminium framed panels
- 10 year materials warranty
- AS/NZS 1170 approved
- Roof slope: up to 60°
- Wind load: 80m/s
- Snow load: 1.4kNm²

Note: not available at all stores but can be ordered



Corrugated Iron Roof



Corrugated Iron Roof

RAILS & SPLICES

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2560mm Solar Panel Rail 3PV	HS-8800	\$49.95	\$44.90	\$39.90
3405mm Solar Ecotech Rail	HS-8801	\$69.95	\$62.95	\$55.95
4200mm Solar Ecotech Rail	HS-8802	\$84.95	\$76.50	\$67.95
Solar Panel Mounting Rail Splice	HS-8803	\$9.95	\$8.75	\$7.75

CLAMPS, HOOKS & LEGS

	Cat.	Qty 1+	Qty 4+	Qty 10+
Solar Panel Rail End Clamp 35mm	HS-8804	\$3.95	\$3.45	\$3.15
Solar Panel Rail Mid Clamp 35mm	HS-8805	\$3.95	\$3.45	\$3.15
Solar Panel Tile Roof Hook	HS-8806	\$26.95	\$23.95	\$21.35
Solar Panel Tin Roof Hook	HS-8807	\$8.95	\$7.95	\$6.95
Solar Panel Adjacent Front Leg Tilt	HS-8810	\$15.95	\$14.35	\$12.70
Solar Panel Mounting Back Leg 10-15°	HS-8811	\$39.95	\$35.90	\$31.90
Solar Panel Mounting Back Leg 15-30°	HS-8812	\$49.95	\$44.90	\$39.90
Solar Panel Mounting Back Leg 30-60°	HS-8813	\$59.95	\$53.95	\$47.90

UNIVERSAL INDIVIDUAL SOLAR PANEL MOUNTING BRACKET

Designed for mounting solar panels individually to a fixed surface, such as the roof of a caravan, motor home, shed, or any number of other applications. Not only do these brackets provide secure and easy mounting, but they also space the panel up to provide necessary airflow. Each bracket includes a stainless steel M6 bolt and nut to attach it to the factory holes in the aluminium frame of your solar panel, meaning that no drilling or modification is required. Sold individually, so you just have to purchase the quantity that suits your panel and application.



Note: Solar panel not included

- Made from 6061 aluminium alloy
- Recommended quantity for panels up to 40W: 4
- Recommended quantity for panels 40W-200W: 6
- Spacing from mounting surface: 22mm
- Dimensions: 80(L) x 68(W) x 35(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	HS-8780	\$7.95	\$6.95	\$6.25

JOINER BRACKET 80MM

Joins two rails together.

- Includes fasteners
- Mounting hole: 9.5(dia.)mm
- 80(L) x 45(W) x 40(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Joiner Bracket 80mm	HS-8714	\$19.95	\$17.70	\$15.70

ALUMINIUM SOLAR PANEL ANGLE MOUNTING BRACKET

An ideal solution for mounting a single solar panel to any number of various applications, allowing you to tilt the panel to your desired angle and easily fold it back down again when not in use. Fantastic for caravan, RV, campervan, marine or other applications. Holes are pre-drilled to line up with common panel sizes such as 80W saving you time and effort in mating your panel to the bracket. Supplied with full stainless steel hardware.

- Dimensions: 670(L) x 30(W) x 60(H)mm, folded



Note: Solar Panel not included



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Pair	HS-8785	\$74.95	\$67.50	\$59.95

ABS SOLAR PANEL MOUNTS FOR CARAVAN/MARINE

Attaching solar panels to the roof of your caravan or the deck of your boat may sound like a relatively straight forward procedure - if you are happy to drill holes. If you've just sunk tens of thousands of dollars into your caravan or boat, that's probably the last thing you want to do, which is why we have introduced this range of ABS solar panel mounts. Quite simply, you stick these heavy duty ABS plastic mounts onto your caravan or boat using Sikaflex®, and then screw your panel onto the mount. The solar panel is kept with adequate space underneath for cooling, and the curved design ensures adequate wind deflection for high winds. There are 4 different products, which can be used in any combination to suit your specific application. White in colour.



ABS SOLAR PANEL CORNER MOUNTS - SET OF 4, CAT. HS-8860

A set of four corner mounts, to attach each corner of your solar panel to your desired mounting surface. These can be used on their own for solar panels 40W or smaller.



- Dimensions: 150(L) x 150(W) x 65(H)mm

ABS SOLAR PANEL SIDE MOUNTS 180MM - PAIR, CAT. HS-8862

This pair of side mounts are intended to be attached to the long edge of taller solar panels, such as 80W and above, adding extra mounting strength and giving more wind deflection.



- Dimensions: 180(L) x 120(W) x 65(H)mm

ABS SOLAR PANEL SPOILER MOUNTS 510MM - PAIR, CAT. HS-8864

Specifically designed to deflect wind on solar panel edges that face into high winds, such as the leading edge of solar panels mounted on caravan or RV rooftops. Well matched to 80W and 90W panels oriented with the short edge leading into the wind.



- Dimensions: 510(L) x 120(W) x 65(H)mm

ABS SOLAR CABLE ENTRY POINT, CAT. HS-8866

Usually, at some point the solar power cables need to enter into the caravan or boat and down to the battery area. To avoid making unsightly and potentially leaky cable entries, you can use this neat product and drill out your cable entry point, and then cover it over giving you two fully waterproof cable gland cable entries that look neat and purpose built.



- IP67 cable glands included
- Dimensions: 100(L) x 90(W) x 45(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Corner Mounts Set of 4	HS-8860	\$34.95	\$31.45	\$27.90
Side Mounts 180mm - Pair	HS-8862	\$19.95	\$17.95	\$15.70
Spoiler Mounts 510mm - Pair	HS-8864	\$39.95	\$35.90	\$31.90
Cable Entry Point	HS-8866	\$14.95	\$13.45	\$11.95

SOLAR PANEL MOUNTING HARDWARE

WATERPROOF SOLAR POWER "PV" CONNECTORS

IP67 rated for maximum environmental protection, these photovoltaic (PV) system connectors are ideally suited to harsh installations such as solar panel arrays and other permanent outdoor applications. When matched with our solar power cables WH-3120 and WH-3122, you can leave your cabling out in the open with the knowledge that you will never have a bad connection or an oxidised power cable. Both panel mounting and in-line connectors are available to suit a wide range of system applications:

Assembly Tool: TH-1930
Suitable crimping tools: TH-1834/TH-2000

- Pin dimension 4mm
- Tin plated copper contacts
- Contact resistance <5mΩ
- IP67 rated
- -40°C to +90°C
- Housing material PPO
- TUV certified

Specifications	All
Rated voltage	1000VDC
Rated current	30A at 70°C, 25A at 85°C
Contact resistance	<5 milliohms
Temperature range	-40 - 90°C
TUV certification	2 PFG 1161/01.06



Size	Cat.	Qty 1+	Qty 10+	Qty 50+
Female Inline	PS-5100	\$7.50	\$6.75	\$5.95
Male Inline	PP-5102	\$7.50	\$6.75	\$5.95
Female Panel Mount	PS-5104	\$7.50	\$6.75	\$5.95
Male Panel Mount	PP-5106	\$7.50	\$6.75	\$5.95

SOLAR PANEL 'Y' LEADS

Used for connecting the output of two solar panels in parallel or connecting multiple panels in an array. Waterproof and UV resistant.

- Pin dimension 4mm
- Contact resistance <5m ohm
- -40°C to +90°C
- TUV certified.
- Tin plated copper contacts
- IP67 rated
- Housing material PPO
- Both are 300mm long.

2 SOCKETS TO 1 PLUG Generally used on the positive pole of the panel.



2 PLUGS TO 1 SOCKET Generally used on the negative pole of the panel.



	Cat.	Qty 1+	Qty 10+	Qty 50+
2 Sockets to 1 Plug	PS-5110	\$19.95	\$17.70	\$15.70
2 Plugs to 1 Socket	PS-5112	\$19.95	\$17.70	\$15.70

CIRCUIT PROTECTION FOR PV APPLICATIONS

DIN RAIL MOUNTING AC CIRCUIT BREAKERS

DIN rail mounted circuit breakers for domestic and commercial switchboards, fuse boxes, distribution boards etc.

- Standard DIN profile.
- Electrical safety authority approved.



240VAC	Cat.	Qty 1+	Qty 4+	Qty 10+
Single Pole - 10A	240VAC SF-4150	\$4.95	\$4.45	\$3.90
Single Pole - 16A	240VAC SF-4151	\$4.95	\$4.45	\$3.90
Single Pole - 20A	240VAC SF-4152	\$4.95	\$4.45	\$3.90
Single Pole - 32A	240VAC SF-4153	\$4.95	\$4.45	\$3.90

NON-POLARISED DC MICRO CIRCUIT BREAKER (MCBS)

Under the latest revision of the standards for solar installations that are now in effect, AS/NZS 5033:2012, over current protection for solar PV arrays must use non-polarised DC circuit breakers. This 2-pole non-polarised DC breaker meet the requirements of the standard by complying to IEC 60947-2.



	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Pole - 10A 550VDC	SF-4154	\$32.95	\$29.45	\$26.45

4 WAY LOCKABLE IP66 CIRCUIT BREAKER ENCLOSURE

Designed to take the range of DIN rail circuit breakers. Standard 4-pole ABS enclosure, spring loaded clear front cover with padlock tabs, top, bottom and rear cable entry, DIN rail included, sealed to IP66. Suitable for electrical installations or solar applications.

- Dimensions: 96(W) x 195(H) x 98(D)mm



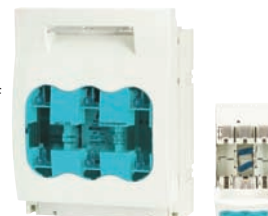
	Cat.	Qty 1+	Qty 4+	Qty 10+
Fuse Holder	SF-4158	\$34.95	\$31.45	\$27.90

FUSE HOLDER/DISCONNECTOR FOR HRC FUSES (NT00)

This high powered 3 pole fuse link holder is ideal for use to protect high current applications used in modern solar/inverter installations.

The fuse holder supports up to 3x fuse links of up to 160A each (sold separately). Features a pull down knife switch disconnection handle so system can be shut down quickly if the need arises.

- Suits NT00 size low voltage high rupture capacity (HRC) fuse links.



Specifications	All
Rated insulation voltage (AC)	690V
Rated insulation voltage (DC)	250V
Current (max)	160A (per circuit)
Dimensions	105(W) x 200(H) x 83(D)mm

SF-4166

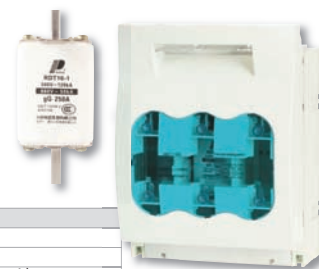
Note: Fuses not stocked at all stores. Call ahead to check and order in.

	Cat.	Qty 1+	Qty 10+	Qty 25+
Fuse Holder	SF-4160	\$79.95	\$71.95	\$63.95
50A HRC Fuse NT00	SF-4162	\$4.95	\$4.45	\$3.90
80A HRC Fuse NT00	SF-4164	\$4.95	\$4.45	\$3.90
125A HRC Fuse NT00	SF-4166	\$4.95	\$4.45	\$3.90

FUSE HOLDER/DISCONNECTOR FOR HRC FUSES (NT1)

A high current 3 pole fuse link holder ideal for use in high current applications such as solar, battery and inverter installations. The fuse holder supports up to 3x fuse links of up to 250A each, sold separately. Features a pull down knife switch disconnection handle so system can be shut down quickly if the need arises.

- Suits NT1 size low voltage high rupture capacity (HRC) fuse links.



SF-4170

Specifications	Both
Rated insulation voltage (AC)	690V
Rated insulation voltage (DC)	250V
Current (max)	250A (per circuit)
Dimensions	185(W) x 245(H) x 110(D)mm

Note: Fuses not stocked at all stores. Call ahead to check and order in.

	Cat.	Qty 1+	Qty 10+	Qty 25+
Fuse Holder NT1	SF-4170	\$129.00	\$115.95	\$102.95
250A NT1 HRC Fuse	SF-4172	\$8.95	\$7.95	\$6.95

ULTRA HIGH CURRENT FUSES

Littelfuse® patented technology designed for high current protection, found OEM on Ford, GM and Chrysler vehicles. Slo-Blo® feature eliminates nuisance blowing during temporary, short duration overloads. Commonly used for battery and alternator connections and other heavy gauge cables requiring ultra high current protection.

- SF-1982 and SF-1984 are slow blow fuses
- SF-1986 is a short-circuit protection device
- Rated up to 32V AC or DC.
- Terminal studs 8mm.



HIGH CURRENT FUSE HOLDER BOLT-DOWN FUSE 125A BOLT-DOWN FUSE 250A

Cat SF-1980
Cat SF-1982
Cat SF-1984



	Cat.	Qty 1+	Qty 10+	Qty 25+
Fuse Holder	SF-1980	\$24.95	\$22.35	\$19.70
Bolt Down Fuse - 125A	SF-1982	\$9.95	\$8.75	\$7.75
Bolt Down Fuse - 250A	SF-1984	\$9.95	\$8.75	\$7.75

SOLAR CONTROLLERS & REGULATORS

CIRCUIT PROTECTION FOR PV APPLICATIONS (CONTINUED)

STAINLESS STEEL POWER DISTRIBUTION POSTS

DO NOT USE FOR 240V



Heavy duty stainless steel posts mounted on a moulded plastic base.

Three versions available with single connection or dual post with bridging plate to suit a variety of power distribution applications.

- Mounting hole diameter: 4.5mm
- Mounting hole spacing: 36mm between centres
- Dimensions: 45(W) x 43(L) x 35(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Single M10	SZ-2090	\$9.95	\$8.75	\$7.75
Twin M8	SZ-2092	\$10.95	\$9.75	\$8.75
Twin M6	SZ-2094	\$10.95	\$9.75	\$8.75

SOLAR REGULATORS / CHARGE CONTROLLERS

12V 5A BATTERY CHARGING REGULATOR FOR SOLAR PANELS

Designed for efficiently charging 12V batteries using solar cells rated up to 5 amps. It is easy to wire up, prevents battery discharge during low sunlight and indicates charging and full battery conditions using a yellow and green 3mm LED.

- Ideal for charging 12V SLA batteries from solar panels up to 60 watts.
- 5 amp fuse and fuse holder recommended - not supplied.



Specifications	AA-0348
Input	14 to 22V (open circuit voltage), nominal 12V
Max. input current	5A
Inrush voltage	battery voltage < approx. 13.2V
Interrupting voltage	battery voltage > approx. 13.9V
Own power consumption	< 3.9mA (LED's on)
Dimensions	72(W) x 50(D) x 43(H)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 5A	AA-0348	\$29.95	\$26.90	\$23.70

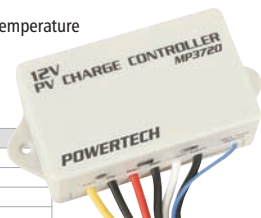
LOOK FOR OUR NEW RANGE OF PURE SINE WAVE INVERTERS WITH BUILT-IN SOLAR REGULATORS ON PAGE 317

12V 8A WATER RESISTANT PWM SOLAR CHARGE CONTROLLER

Suitable for both wet-cell and sealed lead-acid batteries and uses pulse width modulation for optimal 3-stage charging. It is compatible with all types of solar arrays and is potted in epoxy resin making it water resistance and suitable for use in areas of high humidity, such as outdoor or mounted to the back of a solar panel. The controller also features a "night light" load output which will automatically connect the load during the evening and disconnect it during the daytime, which also has low-voltage disconnect/re-connect protection. Reverse current flowing through the solar array is automatically blocked in this unit which removes the requirement for a separate blocking diode, and different charge voltages are selectable for wet or sealed type lead-acid batteries.

- Over current, over voltage, short circuit, over temperature and reverse polarity protections also featured.
- Full specs available on our website.

Specifications	MP-3720
Max PV open circuit voltage	26VDC
Max PV short circuit current	10A
Battery voltage	12VDC
Rated PV input current	8A (10A max)
Load voltage	12VDC
Rated load current	8 amps (10A max)
SLA charging voltage	14.5VDC
Wet cell charging voltage	14.8VDC
Float voltage	13.8VDC
Standby current consumption	7mA
Dimensions	97(L) x 46(W) x 26(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 8A	MP-3720	\$59.95	\$53.95	\$47.90

12V 20A SUPER SOLAR PANEL REGULATOR

With a massive 20 amp current handling, this switching solar panel regulator is lightweight, easy to install and does not require a heatsink. It installs easily and features automatic operation, LED power indication and boasts an efficiency up to 99.2% @ 20 amps. Not only does the regulator switch the solar panel in and out depending on the battery voltage, the regulator will disconnect the solar panel after approx 20 minutes at night fall to prevent any losses into the panel overnight. Completely Automatic.

- Battery or solar power LED indication
- Suitable for 1 to 20 amps
- Handles open circuit panel voltages 30 Volts
- Reverse Polarity Protected

Specifications	MP-3126
Terminals	6.4mm spade lug
Efficiency	97.0% @ 5 amps, 98.5% @ 10 amps, 99.2% @ 20 amps
Weight	65 grams
Measures	66(L) x 51(W) x 34(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 20A	MP-3126	\$79.95	\$75.95	\$71.95

SOLAR CHARGE CONTROLLERS

You make a substantial investment in a solar power setup, so make sure you look after your expensive batteries. With these charge controllers, you have total control over battery charging and power usage.

The LCD shows the system status and LEDs at a glance show battery charge status, load status and solar panel connection.

They also have features like microprocessor control, programmed with 3-stage charging algorithms and pulse width modulation duty cycles of 0 - 100% to provide optimum charge conditions and battery life. 12V and 24V models available.



- User-adjustable charging voltages
- Suitable for wet or sealed lead-acid, lead calcium, lead antimony, Ni-Cd or NiFe batteries
- Microprocessor control PWM (Pulse Width Modulation) for optimum charging
- 3-stage, bulk, absorption and float charge modes with status on LCD
- Amp-hour logging readouts in 3 sets, today & last 2 days
- 5-state LED indications of battery levels
- Electronic overcharge protection and back current blocking to panel
- Dusk to dawn automatic on-off with 10 selectable on-off programs
- Adjustable battery low voltage level disconnect and reconnect for DC outputs
- System status display: charge current, battery voltage and capacity
- Overload and short circuit protection
- Over voltage and reverse polarity protection

REFER TO YOUTUBE VIDEO SBC7120 FOR INSTALLATION INFORMATION



Three models in this range:

Specification	MP-3129	MP-3722	MP-3724
Rated charge/load current	20A	30A	20A
System voltage	12V	12V	24V
Dimensions	150(W) x 85(D) x 45(H)mm	150(L) x 85(W) x 50(H)mm	150(L) x 85(W) x 50(H)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 20A	MP-3129	\$149.00	\$133.95	\$118.95
12V 30A	MP-3722	\$199.00	\$178.95	\$158.95
24V 20A	MP-3724	\$199.00	\$178.95	\$158.95

BATTERY TEMPERATURE SENSOR FOR SOLAR CHARGE CONTROLLERS

Designed to compensate the charging voltage of PV charge controllers and lead acid battery chargers. It's an integrated circuit temperature sensor, sealed in epoxy to a copper sensor lug that connects to the battery terminal. It has a sensing temperature range of -40° to 100°C. The sensor IC has a gain of 10mV/degree Celsius and it is calibrated with the temperature compensation circuit of our PV charge controllers at 25° at the rate of 20mV per degree of temperature change, for example, a temperature increase of 10° will decrease the charging voltage by 200mV, and a decrease of 10° will increase the charging voltage by 200mV.

Specifications	MP-3725
Min temperature	-40°C
Max temperature	100°C
Output voltage at 25°C	2.98V
Sensor gain	10mV/°C
Impedance	0.6 ohms
Max forward current	10mA
Max reverse current	15mA

- Suitable for solar charge controllers MP-3129, MP-3722, MP-3724.



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	MP-3725	\$29.95	\$26.90	\$23.70

SOLAR REGULATORS / CHARGE CONTROLLERS (CONTINUED)

12V/24V 30A MPPT SOLAR CHARGE CONTROLLER

MPPT technology uses DC to DC conversion along with some electronic smarts to be able to extract the absolute maximum charging power from your solar panels, giving you up to an extra 10-40% from your solar panels when compared to a normal PWM charge controller. Adding to the benefits of MPPT technology are the features of this charge controller, such as 3-stage battery charging, twin timer programming, 30A load control with automatic load disconnection/reconnection, and much more. Programming is simple and intuitive via the front panel buttons whilst the LCD screen shows you what's happening. Suitable for 12V or 24V systems.

- Microprocessor controlled MPPT
- 3-stage charging
- 30A automatic load control with low-voltage disconnect/reconnect
- LCD display
- Two timers available for programming
- Includes temperature sensor for battery charging compensation
- Protection against over voltage, reverse connection, short circuit, over current, and over temperature

Specifications	12V Battery	24V Battery
PV nominal voltage	12V or 24V	24V
Max PV array	360W	720W
Max PV open circuit voltage	65V	65V
Bulk charge (adjustable)	13.80-14.8V	27.6-29.6V
Float voltage (adjustable)	13.0-14.0V	26.0-28.0V
Max charge current	30A	30A
Max load current	30A	30A
Ambient temp range	-20°C - 50°C	-20°C - 50°C
Efficiency	97%	97%
Dimensions	205(L) x 145(W) x 55(H)mm	



NOTE: This unit WILL charge a 12V battery from 24V solar panels, but not vice versa.

	Cat.	Qty 1+	Qty 2+	Qty 4+
12V/24V 30A	MP-3735	\$259.00	\$235.00	\$209.00

12V 40A DUAL BATTERY DC-DC CHARGER WITH MPPT SOLAR REGULATOR

This fantastic product is a dual battery DC charger and a MPPT solar charge controller in one - meaning it can take care of most of the charging of your deep cycle battery in your camper, caravan or RV.

The DC-DC charger is a full buck-boost type DC to DC charger, which boosts or reduces the incoming DC voltage to produce the FULL output voltage required to properly charge your deep cycle battery to a full 100% with true 5-stage charging. That means it eliminates the dreaded voltage drop issue, and it's also completely safe to have it operating constantly as it has proper maintenance charging. It can also charge a 12V battery from a 24V alternator, and vice versa! The cut-in and cut-out voltages are completely programmable, so its fully compatible with 2-stage alternators found on newer model 4WDs and utes.

When you are camping, the MPPT solar controller takes care of charging, providing up to 95% efficiency. The wide input voltage allows you to have either a 12V or 24V solar array to charge your deep cycle (12V or 24V), so it has maximum flexibility available. The unit will automatically flick over to solar power (if available) once it detects that the engine is not running, so everything just works automatically. The unit is programmed via the front control buttons with an LCD screen to display all the info.

- 5-stage charging
- 12V or 24V battery charging
- Programmable charge voltages
- Priority to solar charging when engine not running
- Fully programmable cut-in/cut-out voltages
- Suitable for wet/AGM/Gel lead-acid batteries
- Common negative grounding

Specifications	MP-3744
DC input voltage	10-50VDC
Adjustable cut-out	10-12.5V
Adjustable cut-in	12-13V
Solar input voltage	10-50VDC
Max solar array	480W (charging 12V battery), 960W (charging 24V battery)
Max charge output	40A
Dimensions	236(L) x 203(W) x 88(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
12V 40A	MP-3744	\$449.00	\$405.00	\$359.00

SUNSTAR ADVANCED MPPT SOLAR CHARGE CONTROLLERS

True commercial grade MPPT solar charge controllers from Rich Electric, with a whole host of features to suit almost any system. These controllers feature high grade maximum power point tracking (MPPT) to provide maximum efficiency in converting solar generated power into battery charging. With a wide solar (PV) input voltage range and ability to charge either a 12V, 24V, 36V or 48V battery, these MPPT controllers can

- Continuous output power has NO DE-RATING at up to 50°C ambient temperature
- Supports flooded lead-acid, GEL, AGM and LiFePO4 batteries
- Full 4-stage battery charging
- Built-in energy monitor tracks power production and consumption to calculate the capacity remaining in the battery (requires external current shunt)
- Built-in backlit 2 line LCD character display
- Data logs total energy harvested for last 90 days, displaying in Wh, kWh or Ah
- Two programmable auxiliary relay outputs available
- Multiple units can be stacked for larger systems (up to 16 units in parallel)

Two models available:

Specifications	MP-3736/MP-3733
Max charge current (continuous at 50°C)	50A (MP-3736), 80A (MP-3733)
Battery voltage	12V, 24V, 36V or 48V
Max PV input current	40A (MP-3736), 70A (MP-3733)
Input voltage range	16-112VDC operating, 140VDC open circuit
Efficiency	>95%
DC to DC conversion capability	
12V battery	16-112VDC
24V battery	32-112VDC
36V battery	48-112VDC
48V battery	64-112VDC
Max PV array	3250W (MP-3736), 5200W (MP-3733), max when equalising 48V battery to 65V
Charging modes	bulk, absorption, float, auto/manual equalisation
Battery temp compensation	5.0mV per °C per 2V of battery
Standby power	<2W
Operating temp	full output power up to 50°C ambient
Dimensions	268(H) x 196(W) x 147(D)mm (MP-3736), 415(H) x 225(W) x 147(D)mm (MP-3733)
Weight	4.3kg (MP-3736), 7.1kg (MP-3733)

be used in any number of different system applications. The two auxiliary relay outputs can also be configured to do such tasks as start up a generator with remote start, or control a dump load so that you can also incorporate a wind generator into the system. With the ability to parallel stack up to 16 units, they can even be applied to solar arrays up to 60kW! See user manual on our website for full features and specifications.



Note: Not stocked at all stores but can be ordered

	Cat.	Qty 1+	Qty 2+	Qty 4+
50A	MP-3736	\$849.00	\$765.00	\$679.00
80A	MP-3733	\$1299.00	\$1169.00	\$1039.00

SOLAR REGULATORS/CHARGE CONTROLLERS (CONTINUED)

12 - 48V SUNSTAR SOLAR LINKABLE CHARGE CONTROLLERS

These professional grade, high current solar charge controllers offer the flexibility to suit almost any solar installation. System voltage can be 12, 24 or 48V, and multiple units can be stacked together (up to 10 units max) allowing your system to grow and expand without rendering your old charge controller useless. Each unit features an LCD and front panel controls, and can be used as either a battery charger, load controller or diversion regulator. They can also be connected to a remote control for remote monitoring, and are fully protected against reverse polarity, short circuit, high temperature and overvoltage. Particularly suited to the SuperCombi and CombiPlus units, as they communicate via data cables to exchange charging information.



RICH ELECTRIC



2 YEAR WARRANTY

Specification	MP-3728
System voltage	12 - 48V
Max solar voltage	140V
Max operating voltage	68V
PV current	60A

Specifications	MP-3728/MP-3729
Parallel connection (x 10 units)	Up to 600A
Min. voltage to operate	9V
Power Consumption	25mA while operating, 3mA when idle (inc. LCD)
Operating ambient temp	-40°C - 70°C
Cutout solar	@ 90°C
Cutout load	@ 70°C
Reconnect solar	@ 70°C
Reconnect load	@ 50°C
Humidity	100% non-condensing with conformal coating on both sides of all PCBs
Largest wire	35mm ² / 2GA
Enclosure	Type 1, indoor rated
Weight	2kg
Dimensions	266(L) x 127(W) x 75(H)mm

Circuit protection:

- Reverse polarity
- Short-circuit
- Over current
- Lightning and transient surge protection, using 4500W transient voltage suppressors
- High temperature protection via automatic current reduction or complete shut down
- Prevents reverse current from battery at night

NOTE: requires data cable (WI-5250, WI-5252, WI-5254) for parallel stacking or connection to SuperCombi/CombiPlus units. PV nominal voltage must be same as battery voltage.



	Cat.	Qty 1+	Qty 2+	Qty 4+
60 Amp	MP-3728	\$389.00	\$355.00	\$315.00
Remote to suit	MP-3729	\$99.95	\$89.95	\$79.95

AUTO TRANSFER SWITCH & DC CHARGE CONTROLLER

MAINS AUTO TRANSFER SWITCH

The automatic transfer switch (ATS) allows you to connect your 240V power load to a mains power source, with a backup power source connected should the mains power source be interrupted, and provides automatic transfer for the load from the mains source to the backup source. Perfect for caravans and motor homes already fitted with an inverter and battery setup, as it allows the caravan to plug into "park" power, and automatically switch over to inverter power once unplugged from the caravan park supply. Also suitable for home or office backup power systems, or anywhere where a master and slave power source is present and automatic switching is required.

- Suitable for sensitive electrical equipment
- Monitors master power input with power protection
- Total switching time less than 12milliseconds
- Switching capacity: 20A
- Frequency: 50/60Hz (selectable)
- Universal output sockets
- Hard wired master & slave input terminals
- LED power status indicators

Specifications	MS-5300
Input voltage	190 - 240VAC
Switching capacity	20A
Trip level mains - generator	<180VAC
Trip level generator - mains	<188VAC
Switching time	<12m sec
Continuous power stability interval	30 secs
Dimensions	220 x 130 x 95mm



2 YEAR WARRANTY

	Cat.	Qty 1+	Qty 3+	Qty 6+
240VAC 20A	MS-5300	\$199.00	\$178.95	\$158.95

TECH TALK!

SOLAR CHARGE CONTROLLERS

Directly connecting a solar panel or array to a battery can be catastrophic as solar panels can output a wide voltage range. As an example, a nominal 12 volt rated panel can output anything up to 22 volts during an average sunny day. A solar charge controller between the panel and the battery ensures the battery receives the correct output voltage and current from the panel to minimise the risk of the battery being overcharged or discharging back into the panels. Charge controllers come in a variety of types which give different performance and can be matched to simple recreational applications all the way up to complex high power solar array installations

SWITCHING:

Simple switching controllers connect the panel to the battery when the panel is providing power and the battery is not fully charged. This type of controller is low cost and only good for basic solar equipment setups such as standby lighting, etc where the panel yield is far higher than the load requires.

PWM:

Pulse width modulated (PWM) controllers continually apply voltage pulses to the battery whenever the panel is providing sufficient voltage. The pulse width (or duration) is varied by the controller depending on the charge state of the battery to ensure the correct amount of charge is harvested from the panel whenever it is available. As a result, PWM controllers provide a much higher power yield than simple switching controllers.

MPPT:

Maximum power point tracking (MPPT) controllers maximize power conversion between the panel output and the battery input by using a DC to DC switchmode power converter. By continuously tracking the panel output and adjusting the converter they yield the maximum amount of power under widely varying solar conditions. MPPT controllers give the best solar system efficiency and improve solar system power yield by a significant percentage.

Both PWM and MPPT controllers are available with display panels which allow you to track performance of the solar system. Panel voltage, battery voltage, charging current, and total charge supplied can be easily displayed so you can ensure the system is running correctly. More complex models also include integration functions to remotely control other equipment or be linked into advanced systems.



GRID CONNECT INVERTERS

*When connected directly to the solar array, photovoltaic power is controlled by the SolarWorx grid-tie using Maximum Power Point Tracking (MPPT) to ensure the maximum amount of solar power is obtained and fed back into the grid at all times.

The bonus feature of these SolarWorx grid-tie inverters is that they can alternatively use a battery bank to convert battery stored power and

Available in 12V and 24V variations, and rated at 2000W output, these SolarWorx grid-tie inverters will allow you to maximise your government rebate and yet still allow you to further expand your solar system in the future without needing to replace your Grid-Tie inverter. Made by the same manufacturer as our brilliant SuperCombi and CombiPlus units, these are backed by an Australian-serviced 2 year manufacturer's warranty.

See our website for a downloadable user manual and example system connection diagrams. NOTE: Contact your local electricity provider for details on grid-tied solar power credits. Special metering is required to receive feed-in tariffs.

- AC circuit breakers built in
- Suitable for use with solar, wind*, hydro or other renewable energy sources
- Maximum Power Point Tracking (MPPT) system
- High efficiency
- Pure sine wave output
- Low frequency inverter design (based on toroidal transformer)
- LCD front panel display provides readout of system parameters
- Programmable via front panel
- Feeds power to the grid either directly from a solar array or from energy stored in a battery bank
- Optional external remote control



APPROVAL
SAA100339

AS/NZS 4777,
AS/NZS 3100



NEW
LOW PRICE

NOTE

See our dedicated power systems website www.jaycar.com.au/powertech for downloadable product information brochures and specifications, or email our team of power experts for more information at powertech@jaycar.com.au

RICH ELECTRIC

feed that back into the grid. This enables much greater control over the way you manage and store the solar generated power, as it allows you to easily connected to pre-existing battery based systems, or gives you the ability to add multiple renewable power sources such as wind and hydro, or even add an advanced power management system such as a SuperCombi or CombiPlus to provide full blackout and power backup protection.

Two Models:

GRID TIE INVERTER 12VDC 2000W
Cat. MI-5192

GRID TIE INVERTER 24VDC 2000W
Cat. MI-5194

Specifications:	MI-5192	MI-5194
Input		
Max input power at 50°C	2400W	2400W
Max DC input current	180A	90A
Max DC input voltage	40VDC	80VDC
MPPT range	16.5 - 32VDC	32 - 64VDC
Battery Input Voltage	10-16VDC	20-32VDC
Output		
Output power nominal	2000W	2000W
Output power max	2200W	2200W
Output voltage range	205 - 265VAC	
Output frequency	50Hz ± 1Hz	
Night power consumption	Nil	
Input/output isolation	3500VDC via toroid transformer	
Anti islanding protection	Over/under voltage, over/under frequency active phase shift	
Parameters displayed	PV voltage, PV current, AC grid voltage, current, feed power, kWh	
Dimensions	424(H) x 256(W) x 368(D)mm	
Weight	26kg	
Approval	SAA100339	

TECH TALK!

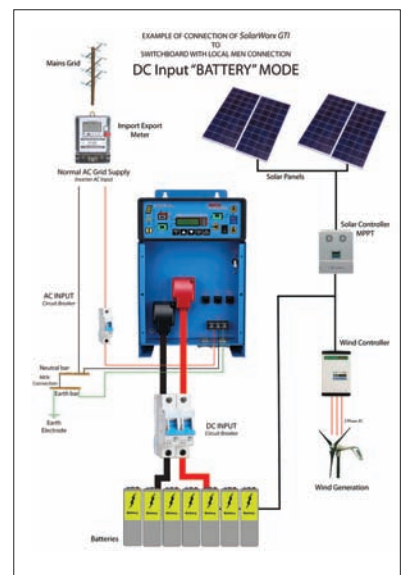
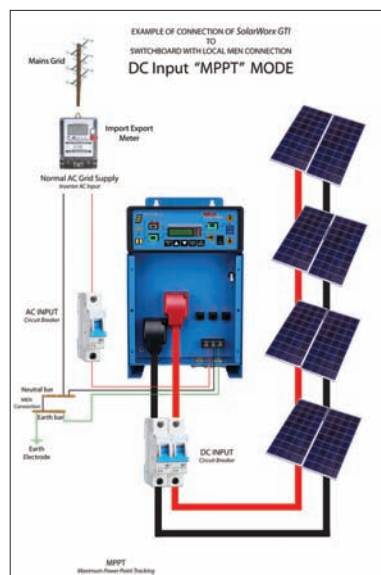
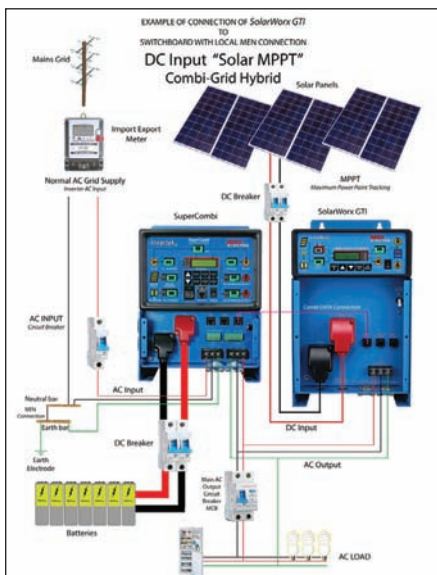
*Wind turbine generators must have clean DC output. External turbine regulator may be required for AC/3-phase wind generators where a battery bank is not used.



**MASSIVE PRICE REDUCTION
SAVE OVER 50% PER UNIT**

	Cat.	Qty 1 +
2000W Grid Connect Inverter - 12VDC	MI-5192	\$699.00
2000W Grid Connect Inverter - 24VDC	MI-5194	\$699.00

SAMPLE SYSTEMS



TECH TALK!

*HYBRID SYSTEM

In this system, a SuperCombi inverter/charger system is put in between the Grid-Tie inverter and the grid, and the two are linked. In this mode, you can take advantage of the features of BOTH the Grid-Tie system and the SuperCombi - providing such features as charging the batteries from solar power during the day, off-peak battery charging from grid at night, full blackout and backup protection, handsome feed-in tariffs and more.

TECH TALK!

*BATTERY MODE

Solar panels, and/or other alternative energy sources, are connected to a battery bank via external charge controllers. Power is fed from the battery bank into the Grid-Tie inverter, and then fed back into the grid.

COMBI SERIES INTERACTIVE INVERTER-CHARGERS

Packed inside each Combi Series Interactive inverter-charger are three main components: a powerful low-frequency pure sine wave inverter, a high power 4-stage battery charger, and a fast action automatic AC transfer switch. By including all the core functionality within one unit, the Combi Series are able to provide fully automatic operation and management of your entire power system. Be it a caravan, motorhome, marine vessel, off grid home, or backup power system - the Combi Series Interactive inverter-chargers have all the features you need, plus many many more.

FEATURES

- Powerful sine wave inverter, battery charger & automatic AC transfer switch in 1 unit
- Compact design with big power handling
- Intelligent, automatic power management
- Automatically switches between inverter power, generator power and park power (or other AC input)
- Automatically charges the batteries when an AC generator (or other AC power source) is connected
- Power output guaranteed up to 70°C, perfect for harsh outback conditions
- Can automatically start the generator when required
- Boost the AC input power with inverter power for more output power!
- Stack multiple units for more power
- 2-phase and 3-phase capable
- Options for full control & monitoring of solar, AC generator, DC charging, DC loads, etc
- Expanding options allow for cost effective and simple upgrades
- Designed in Australia to suit harsh Australian conditions

MASSIVE SAVINGS!

NEW LOW PRICE

RICH ELECTRIC

MORE INFO WEB

2 YEAR WARRANTY



	COMBIPLUS SPECIFICATIONS		SUPERCOMBI SPECIFICATIONS		
CombiPlus Specifications	MI-5270	MI-5273	MI-5250	MI-5251	MI-5253
Type	12V 1500W	24V 3000W	12V 1500W	24V 1500W	24V 3000W
General					
Power sharing	10A	20A	10A	10A	20A
Auto transfer	16A	32A	16A	16A	32A
Power stacking & 2 / 3 phase option	Yes	Yes	Yes	Yes	Yes
Weight	21kg	27kg	21kg	21kg	27kg
Dimensions L x W x H	370 x 258 x 362	370 x 258 x 424	362 x 258 x 370	362 x 258 x 370	424 x 258 x 370
Inverter					
Output power continuous at 70°C	1500W	3000W	1500W	1500W	3000W
Output power surge	3000W	6000W	3000W	3000W	6000W
No load power	8W	12W	8W	8W	12W
Input voltage	9.3 - 17VDC	18.6 - 34VDC	9.3 - 17VDC	18.6 - 34VDC	18.6 - 34VDC
Output voltage	210 - 245VAC	210 - 245VAC	210 - 245VAC	210 - 245VAC	210 - 245VAC
Output waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
Efficiency	82%	86%	82%	84%	86%
AC Charger					
Input voltage	180 - 270VAC	180 - 270VAC	180 - 270VAC	180 - 270VAC	180 - 270VAC
Maximum DC ripple	<1.25VRMS	<1.25VRMS	<1.25VRMS	<1.25VRMS	<1.25VRMS
Output charge voltage	12 - 16VDC	24 - 32VDC	12 - 16VDC	24 - 32VDC	24 - 32VDC
Charge current (main batteries)	70A	70A	70A	35A	70A
Charge current (aux battery)	4A	4A	4A	4A	4A
AC Input Switch					
Thermal circuit breaker	15A	30A	15A	15A	30A
AC input fault detection time	4 - 10ms	4 - 10ms	4 - 10ms	4 - 10ms	4 - 10ms
Trip level mains to inverter (user adjusted)	<180VAC	<180VAC	<180VAC	<180VAC	<180VAC
Trip level inverter to mains (user adjusted)	>187VAC	>187VAC	>187VAC	>187VAC	>187VAC

Features	CombiPlus	SuperCombi
Intelligent grid & generator power management	*	*
ATS uninterrupted AC transfer switch	*	*
Power output rated to 70°C	*	*
2-phase and 3-phase capability	*	*
Stackable for more power	*	*
Power Support feature	*	*
Dynamic Power Shifting	*	*
4-Stage adaptive charging system	*	*
Solar Charging control (accessories required)	*	*
Full remote system control (accessories required)	*	*
Auto generator start function	*	*
Aux. battery charge output	*	*
Programmable Aux. relay outputs (x3)	*	*
Interactive Pure Sinewave Inverter-Charger	*	*
DC Load control (accessories required)	*	*
AC Charger Timer and Generator Timer control	*	*
DC Charging Control (accessoires required)	*	*



			Cat.	Qty 1+
↑	CombiPlus	12V 1500W	MI-5270	\$899.00
	CombiPlus	24V 3000W	MI-5273	\$1499.00
↑	SuperCombi	12V 1500W	MI-5250	\$999.00
	SuperCombi	24V 1500W	MI-5251	\$999.00
	SuperCombi	24V 3000W	MI-5253	\$1699.00
↑	Remote Control Panel for SuperCombi		MI-5259	\$149.00
	Remote Control Panel for CombiPlus		MI-5279	\$129.00
↑	Multiphase Data Hub for Combi Series		MI-5276	\$89.00
↑	Parallel Stack Data Hub for Combi Series		MI-5277	\$79.00
↑	Battery Temperature Sensor for Combi Series		MI-5278	\$29.00
↑	Data Leads - 3m		WI-5250	\$14.95
	5m		WI-5252	\$19.95
	10m		WI-5254	\$29.95

LET'S POINT YOU TO THE RIGHT PAGE...

Sight & Sound

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WIRELESS MICROPHONE SYSTEMS

2 CHANNEL DUAL DIVERSITY UHF MICROPHONE SYSTEM

A professional solution suitable for stage use. This 2 Channel Dual Diversity UHF Microphone features a true diversity receiver and guarantees no dead spot in working area. Features advanced digital pilot technology with 30 preset group frequencies. Each group has 8 frequencies and can ensure 200 systems without interference. The infrared automatic scan feature helps to search available frequencies. The microphone has a splendid LCD display that shows the RF level, AF level and microphone battery voltage. You can adjust the transmitter power (High/Low) from the receiver. The transmitting distance can reach up to 80 metres. The system includes two wireless microphones and a receiver unit with rack mounting hardware.

Specification		Receiver	
Carrier Frequency	UHF520-694MHz	Power Supply	15-17VDC
Frequency Stabilization	$\leq \pm 30\text{ppm}$	Power Consumption	3 Watt
Dynamic Range	$> 100\text{dB}$	Signal/Noise Ratio	$> 95\text{dB}$
Total Harmonic Distortion	$< 0.5\%$	Image & Spurious Rejection	$> 80\text{dB}$
Frequency Response	40Hz-15kHz $\pm 3\text{dB}$	Border upon Channel Rejection	$> 80\text{dB}$
Audio Output Level	Balance 400mV, Unbalance 400mV	Receiving Sensitivity	5dBuV
		De-Emphasis	50uS

Handheld Microphone	
Transmitter Power	30mW
Modulation Type	FM
Deviation	40KHz
Spurious Emission	$> 60\text{dB}$
Batteries Required	2 x AA
Continuous Usage	5 hours

DUAL CHARGING DOCK & BATTERY

KIT TO SUIT AM-4170 UHF MICROPHONE

A rechargeable dual charging dock supplied with 4 x Ni-MH batteries and mains power adaptor. This charging dock is suitable for our AM-4170 2 Channel Dual Diversity UHF Microphone.

- Power supply: 5VDC/1.5A(supplied)
- Charging time: 6 hours



NEW
2015

Lapel Mic may vary from the one shown

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
2 Channel UHF Dual Diversity	AM-4170	\$499.00	\$449.00	\$399.00
Spare Handheld Microphone to Suit	AM-4171	\$149.00	\$133.95	\$118.95
Spare Lapel Microphone to Suit	AM-4172	\$149.00	\$133.95	\$118.95
Dual Charging Dock	AM-4173	\$99.95	\$89.95	\$79.95

PRO 2 CHANNEL 2.4GHZ DIGITAL WIRELESS MICROPHONE SYSTEM

A professional 2.4GHz Digital wireless solution, this 2 channel wireless microphone system will not suffer from the frequency performance issues UHF solutions do (depending on the area, some UHF frequencies will experience interferences due to the digital dividend restack). This professional 2 Channel wireless microphone system adopts the ISM 2.4G digital audio frequency and automatically filters out radio interference. Features smart ID code identifying synchronization technology and comprehensive application of digital audio processing technology. Pre-set 16 selected channels, support multiple installation without interference. The device adopted an efficient battery power consumption design and the microphone can work continuously for five hours.

Specification	
Carrier Frequency	2.404-2.474GHz
Available Channels	16 Channels
Band Range	2MHz

Handheld Microphone	
Transmitter Power	10mW
Modulation Type	GFSK
Batteries Required	2 x AA
Continuous Usage	5 Hours

Receiver	
Power Supply	12-17VDC
Power Consumption	2W
Signal/Noise Ratio	$> 95\text{dB}$
Receiving Sensitivity	-80dBm



NEW
2015

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
2 Channel 2.4GHz Digital Microphone System	AM-4160	\$299.00	\$269.00	\$239.00
2.4GHz Digital Wireless LCD Microphone to Suit	AM-4161	\$119.00	\$106.95	\$94.95
Dual Microphone Dock Charger and Battery to Suit	AM-4162	\$99.95	\$89.95	\$79.95

WIRELESS MICROPHONE SYSTEMS

WIRELESS MICROPHONE SYSTEMS (CONTINUED)

2 CHANNEL 2.4GHZ DIGITAL WIRELESS MICROPHONE SYSTEM

This 2 Channel 2.4GHz Digital Wireless Microphone adopts ISM 2.4G digital audio frequency and automatically filters out radio interference. Features Smart ID code identifying synchronization technology and digital audio processing technology to provide a clear sound reproduction. The pre-set channels support multiple installations in KTV rooms without interference. It comes with an efficient battery power consumption design that helps the microphone to work continuously for up to five hours. Ideal choice for school and home entertainment. The system includes two wireless microphones and a receiver unit.

Specifications		Receiver	
Carrier Frequency	2.404-2.474GHz	Power Supply	12-17VDC
Available channels	2 channels	Power Consumption	2W
Band Range	2MHz	Signal/Noise Ratio	>95dB
Dynamic Range	85dB	Receiving Sensitivity	-80dBm
Total Harmonic Distortion	<0.1%	Handheld Microphone	
		Transmitter Power	10mW
		Modulation Type	GFSK
		Batteries Required	2 x AA
		Continuous Usage	5 Hours



NEW
2015

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
2.4GHz 2 Channel Digital Microphone	AM-4155	\$199.00	\$178.95	\$158.95
Spare Microphone	AM-4156	\$99.95	\$89.95	\$79.95
Docking Charger to Suit	AM-4162	\$99.95	\$89.95	\$79.95

2 CHANNEL WIRELESS UHF MICROPHONE SYSTEM

This wireless UHF Microphone system has a transmission range of about 60m. It supports 2 channels and is supplied with two hand held microphones. The receiver contains a balanced output for 1 channel, or unbalanced for 2 channels mixed, and has level controls for each channel. The microphones are powered by 2 x AA batteries (not included) and a power adaptor is supplied for the receiver. Ideal for schools, churches, weddings, gyms, karaoke, functions, etc.

- Optional belt pack transmitter with lapel microphone, available separately.

Specifications	
Frequency	521.5MHz - 524.5MHz
Transmitter power	30mW
Transmission range	60m
Pick up	Dynamic or condenser
Dimensions	Microphone: 240(L) x 50(Dia.)mm Receiver: 210(L) x 140(D) x 42(H)mm



1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
2 Channel UHF Wireless Microphone (includes two)	AM-4114	\$139.00	\$124.95	\$110.95
Spare Microphone Channel A	AM-4115	\$49.95	\$44.90	\$39.90
Spare Lapel Microphone Channel A	AM-4116	\$49.95	\$44.90	\$39.90
Spare Microphone Channel B	AM-4117	\$49.95	\$44.90	\$39.90
Spare Lapel Microphone Channel B	AM-4118	\$49.95	\$44.90	\$39.90

SINGLE CHANNEL WIRELESS UHF MICROPHONE

The Microphone is supplied with a USB rechargeable battery pack or has an option to be powered by 2 x AA batteries (not included). The systems effective range is 50m on average, making it ideal for street announcers/performers, pubs, club functions, etc.

Specifications	
Frequency	525.5MHz
Frequency response	60Hz - 13kHz
Transmission range	Up to 50m
Mic Power Supply	1 x Rechargeable Battery Pack (3.7V 800mAh Li-ion), 2 x AA (not included)
Receiver Power Supply	6 x AAA (not included)
Dimensions	Microphone 235(L) x 52(Dia.)mm, Receiver 85(L) x 63(W) x 19(H)mm



1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
Single Channel Wireless UHF Microphone	AM-4108	\$79.95	\$71.95	\$63.95

WIRELESS MICROPHONE TRANSMITTER RECEIVER

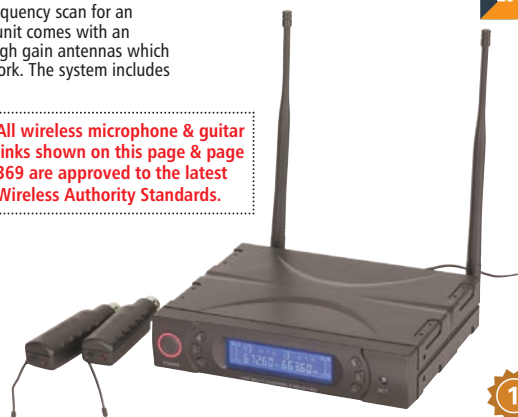
DUAL UHF WIRELESS TRANSMITTER & RECEIVER FOR WIRELESS MICROPHONE

This versatile dual channel UHF wireless system allows you to convert two XLR type wired microphones into wireless microphones. The receiver uses UHF 520-694MHz band to avert interference and features automatic frequency scan for an seamless operation in the available frequencies. It has 99 preset non-interfered channels. The receiver unit comes with an attached LCD display that clearly shows the RF level, AF level, channel and frequency. It also has two high gain antennas which provide a long wireless range up to 50 metres. Ideal for any professional field and media production work. The system includes the receiver unit and two plug-on wireless microphone transmitters. Microphones not included.

Specifications		Transmitter	
Carrier Frequency	UHF520-694MHz	Transmitter Power	mW (max)
Frequency Stabilization	< ±30ppm	Modulation Type	FM
Dynamic Range	>95dB	Deviation	±40kHz
Total Harmonic Distortion	<0.5%	Spurious Emission	>4dB
Frequency Response	40Hz-15kHz ±3dB	Frequency Stabilization	±0.005%
Audio Output Level	Balance 400mV, Unbalance 400mV	Battery Required	1 x AA
		Current Consumption	<90mA

Receiver	
Power Supply	15-17VDC
Power Consumption	2W
Signal/Noise Ratio	>95dB
Image & Spurious Rejection	>80dB
Border upon Channel Rejection	>80dB
Receiving Sensitivity	5dBuV
De-Emphasis	50uS

All wireless microphone & guitar links shown on this page & page 369 are approved to the latest Wireless Authority Standards.



NEW
2015

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
UHF Wireless Microphone System	AM-4165	\$329.00	\$299.00	\$265.00
Spare Microphone Transmitter	AM-4166	\$99.95	\$89.95	\$79.95

KARAOKE MICROPHONE MIXER

KARAOKE STYLE MICROPHONE MIXER

This unit will mix 2 microphones to video and audio input. It has separate microphone volume levels, tone control and a variable echo control. Supplied with 12V power adaptor, 2 sets of AV leads and 1 x 6.5 to 3.5mm stereo adaptor.

- Separate audio input level control
- Audio input is stereo
- On/Off power switch on back of unit
- Works with any 600 ohm dynamic mic. E.g. AM-4096/4099/4190/4192
- Dimensions: 140(W) x 90(D) x 40(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Karaoke Mic Mixer	AM-4222	\$69.95	\$62.95	\$55.95

2 CHANNEL WIRELESS UHF GUITAR LINK

Firstly, this unit complies with the latest UHF frequency allocations for short range wireless PA transmitters. It operates on either 520.5MHz or 532.9MHz, user selectable (It does not have 2 input channels). The transmitter is very compact with an almost unnoticeable 70mm long antenna. A 1/4" (6.5mm) phone plug on the unit simply plugs into the guitar body. Power is by 1 x AAA battery (not supplied). The receiver is very compact, measuring 115(W) x 80(D) x 25(H)mm. A telescopic antenna deploys to 270mm and folds down for transport. The front of the unit has pilot lights for RF signals, AF signal and power. A 12V AC adaptor is supplied to power this unit. Output is via a 3.5mm socket and a 3.5 to 6.5mm adaptor lead is included if necessary. The entire unit comes in a sturdy ABS box with internal foam inserts for the rough-and-tumble of road trips. Instructions supplied.

Specifications	AM-4109
Transmitter	
Freq stability	0.002%
RF output	10mW
Power	Requires 1 x AAA
Range	60m max
Receiver	
Sensitivity	2µV (12dB)
Signal/noise	90dB
Power	Mains
Dimensions	115(W) x 80(D) x 25(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
UHF Guitar Link	AM-4109	\$89.95	\$80.95	\$71.95

MICROPHONES

UNIDIRECTIONAL DYNAMIC MICROPHONE

Dynamic, unidirectional microphone with an anti-pop grille, built-in on/off switch and a plastic finish.

- Fixed 3 metre lead with 6.5mm plug.

Specifications	AM-4190
Type	Unidirectional dynamic
Frequency response	50Hz - 13kHz
Sensitivity	-50dB
Output Impedance	600 ohm
Termination	3 metre cable - 6.5mm plug



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4190	\$9.95	\$8.75	\$7.75

UNIDIRECTIONAL DYNAMIC MICROPHONE - XLR

Dynamic, unidirectional microphone with an anti-pop grille, built-in on/off switch and XLR termination.

- Supplied with a 3m XLR to 6.5mm plug cable.

Specifications	AM-4192
Type	Unidirectional dynamic
Frequency response	50Hz - 13kHz
Sensitivity	-50dB
Output Impedance	600 ohm
Termination	3 metre cable - XLR plug



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4192	\$14.95	\$13.35	\$11.70

DYNAMIC UNIDIRECTIONAL PROFESSIONAL MICROPHONE

With professional styling, it features a cardioid polar pattern for reduced background noise and feedback. This microphone is ideal for use in theatres, nightclubs, public address systems and recording. Excellent frequency response and tough metal construction make this microphone great value.

- XLR termination
- Supplied with a 6m XLR to 6.5mm plug cable.

Specifications	AM-4099
Type	Unidirectional, dynamic
Polar pattern	Cardioid
Impedance	600 Ohms
Sensitivity	-72dB ±3dB @ 1kHz
Frequency response	60Hz - 12kHz
Termination	6 metre cable, 6.5mm plug



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4099	\$29.95	\$26.90	\$23.70

UNIDIRECTIONAL BALANCED PROFESSIONAL VOCAL DYNAMIC MICROPHONE

A top quality balanced mic suitable for singing and band work. Similar performance to those costing \$200 or more.

- Supplied with a 6m XLR to 6.5mm plug cable.
- Case made of zinc-diecast, low impedance.
- Compare with the Shure® SM58!

Specifications	AM-4096
Type	Unidirectional, balanced dynamic
Polar pattern	Cardioid
Impedance	500 Ohms
Sensitivity	-76dB ±3dB @ 1kHz
Frequency response	40Hz - 17kHz
Termination	6 metre cable, XLR



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4096	\$39.95	\$35.90	\$31.90

LET'S FIND EVERYTHING YOU NEED!

FROM
\$1.95
SB-2424



BATTERIES

P323

FROM
\$34.95
SL-2916



PARTY LIGHTING

P375

FROM
\$7.95
AA-2016



HEADPHONES

P381

FROM
\$59.95
AA-0405



ROADIES CABLE TESTER

P414

MICROPHONES & ACCESSORIES

MICROPHONES (CONTINUED)

UNIDIRECTIONAL GOOSENECK MICROPHONE

Capture your audience in any public forum with this professional lectern microphone. Its wide, flat frequency response ensures your speeches sound the way they were intended. The cardioid pickup pattern minimises those annoying noises from nearby speakers and monitors.

- Requires 9 - 52VDC phantom power.

Specifications	AM-4073
Type	Unidirectional
Polar pattern	Cardioid
Impedance	250 Ohms
Sensitivity	-58dB
Frequency Response	100Hz - 16kHz
Low frequency cutoff switch	
Termination	XLR

NEW
LOW
PRICE



↑	Cat.	Qty 1+
	AM-4073	\$39.95

DESKTOP MULTIMEDIA MICROPHONE

Ideal for voice recognition software or simply recording voice and sound. This microphone can sit on your desktop or can be attached to your computer monitor. It produces low noise and has a wide frequency response.

Specifications	AM-4087
Directionality	Omni directional
Sensitivity	-62dB +/- 3dB
Impedance	Low
Frequency	20Hz-16kHz
Cable length	3m
Operating voltage	1V-10V
Mic plug	3.5mm

NEW
LOW
PRICE

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4087	\$9.95	\$8.75	\$7.75

"SPY" PARABOLIC MICROPHONE WITH RECORDER & 8X MAGNIFIER

We stocked this unit many years ago at a much higher price and without the recording ability. The main feature of the unit is the 8" (200mm) parabolic reflector for the inbuilt microphone. This magnifies sounds from up to 100 metres (300 feet) away as if the source was standing next to you. Its uncanny! It is ideal for studying birds and other wildlife as you can use the 8 x image magnifier/monocular to observe as well. If you want, you can record the (sound) event with the inbuilt digital recorder and transfer it to your computer safely later.

It is equipped with a sturdy set of high quality headphones with comfortable ear pads to screen out extraneous noise. Also to assist in this, there is a special background noise filtration unit which is controlled from the body of the pistol-grip unit.

This is a fabulous product and is ideal for the nature lover.

- 9V battery required (not included).
- Parabolic reflector: 200(Dia).mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AM-4040	\$79.95	\$71.95	\$63.95

LAPEL MICROPHONES

TIE CLASP MICROPHONE

Electret condenser tie clasp microphone. Supplied with alligator clip to attach to tie or shirt and 2 metres of cable to 3.5mm plug.

- Ideal for lectures, stage, video recorders etc.

Specifications	AM-4092
Type	Electret condenser
Polar pattern	Cardioid
Impedance	1kohm
Sensitivity	-67dB ± 3dB @ 1kHz
Frequency response	20Hz - 16kHz
Power requirement	1.5VDC 0.7mA max
Termination	2 metre cable, 3.5mm plug

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4092	\$19.95	\$17.70	\$15.70

TIE CLASP CONDENSER MICROPHONE

With excellent sensitivity and low noise, this is the ideal add-on microphone for your digital voice recorder or other portable recording device that only has a tiny built-in microphone. It's very light and unobtrusive, so is ideal for recording interviews, conferences or webcasts.

- Output is to 6.5mm plug
- Cable length 1200mm.

Specifications	AM-4101
Type	Condenser, tieclasp
Polar pattern	Cardioid
Impedance	2.2kohms
Sensitivity	-66dB ± 3dB @ 1kHz
Frequency response	50Hz - 20kHz
Power requirement	1.5VDC 0.6mA
Termination	1.2 metre cable, 6.5mm plug

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4101	\$19.95	\$17.70	\$15.70

STEREO TIE CLASP MICROPHONE

A handy accessory for stereo digital voice recorders or recording in stereo on your laptop. Independent left and right microphones for true stereo. Suitable for recording conferences, music etc.

Specifications	AM-4106
Type	Unidirectional stereo
Polar pattern	Cardioid
Impedance	2kohms
Frequency response	20Hz - 16kHz
Sensitivity	-68dB +/- 3dB @ 1kHz
Termination	1m lead, 3.5mm stereo plug

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4106	\$24.95	\$22.35	\$19.70

MICROPHONE ACCESSORIES

BOOM MICROPHONE STAND

Height adjustable with a boom that extends 600mm, so is suitable for vocals, overheads or micing up drum kits or pianos. Mic holder with 5/8" adaptor included.

- Steel construction
- Folds up to 850mm long

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4113	\$34.95	\$31.45	\$27.90

DESK TOP MIC STAND

Designed for applications where you don't need a full-size mic stand. The build quality is excellent with diecast aluminium legs, steel column and padded feet.

- Adjustable up to a height of 200mm and folds up to 240mm long
- Includes mic holder with 5/8" adaptor

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4111	\$17.95	\$15.95	\$14.35

EXPANDING MICROPHONE HOLDER

This expandable microphone holder will accept standard 22mm tapered microphones and will expand to accommodate larger diameter mics.

- Fitted with a 5/8" x 27 thread
- Black in colour

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4107	\$6.95	\$6.25	\$5.50

GOOSENECK MOUNTING BASE

With 5/8" thread. Surface mountable for microphone & goosenecks.

- Solid metal construction
- Supplied with mounting screws
- Size 44mm base dia

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4130	\$5.95	\$5.25	\$4.75

MICROPHONE ACCESSORIES (CONTINUED)

FLEXIBLE GOOSENECK

- Metal - 450mm long
- 5/8" male to 5/8" female fittings



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
450mm	AM-4127	\$14.95	\$13.35	\$11.70

USB MIDI INTERFACE CABLE

Connect any MIDI device to your computer: keyboards, controllers, instruments, sound cards, samplers, drum machines etc.

- Plug and play, no software or drivers required
- MIDI in and MIDI out connectors with LED indication
- Cable is 2 metres long



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4934	\$29.95	\$26.90	\$23.70

MICROPHONE INSERTS

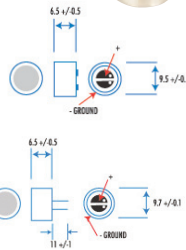
MICROPHONE INSERTS

Replacement electret mic inserts for tape recorders, etc.

STANDARD MICROPHONE INSERT

Replacement electret mic inserts for tape recorders, etc.

- Operates from a single 1.5V battery
- 10mm diameter. 50Hz - 15kHz
- Sensitivity 69dB. Used by OEM's
- Size: 6.5mm x 9.5mm dia



STANDARD MICROPHONE INSERT WITH PINS

PC mount

- Operates from a single 1.5V battery
- 9.7mm dia x 6.5mm high
- 50Hz - 15kHz
- Sensitivity 69dB
- Includes PC mount pins 11mm long

↑	Description	Size(Dia x Hmm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	Standard	6.5 x 9.5	AM-4010	\$2.35	\$2.09	\$1.85
	Standard with Pins	9.7 x 6.5	AM-4011	\$2.35	\$2.09	\$1.85

MICROPHONE HEADSETS

COMPUTER MICROPHONE HEADSET

The headset has adjustable length mic arm to suit all users and a mic boom that rotates up out of the way when not required and can also be bent to suit the user. The headset weight is only 65 grams (excluding cable).

- Cable terminates to 2 plugs. Length - 1.2m.

Headphones	AA-2028
Frequency range	20Hz-20kHz
Impedance	32 ohms
Max. power	100mW
Sensitivity	98dB (1kHz)
Microphone	
Frequency range	50Hz-16kHz
Impedance	Low
Sensitivity	-62dB



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Wired	AA-2028	\$15.95	\$14.35	\$12.70

USB STEREO HEADSET WITH MICROPHONE

A true plug and play headset! It simply plugs into your computer's USB port and delivers excellent sound quality across all music styles. The 38mm drivers ensure solid bass while maintaining a balanced response all the way up to 20kHz. The sensitive electret microphone is fitted to a flexible gooseneck and is fully adjustable.

- Perfect for gaming and VoIP communication
- USB 2.0 compliant

Specifications	AA-2032
Impedance - Headphone	32 Ohm
Driver Diameter - Headphone	38mm
Frequency Response - Headphone	20Hz - 20kHz
Sensitivity - Microphone	-65dB
Sensitivity Pattern - Microphone	Cardioid



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Wired	AA-2032	\$34.95	\$31.45	\$27.90

RECHARGEABLE BLUETOOTH® HEADSET WITH MICROPHONE

Lightweight headset with Bluetooth® wireless technology that can be connected with two Bluetooth® devices at the same time. Talk hands-free while driving, or connect to your Bluetooth® enabled PC or PS3 for hands-free chatting on Skype, MSN and other chat programs. Features anti-noise technology for crystal clear conversation, multifunction button for voice command, last number redial, call rejection, and adjustable volume. The built-in Li-Po battery charges from a USB port (USB cable included). Compatible with all Bluetooth® mobile phones and Smartphones.



- Bluetooth® V2.1 with 10m range
- Supports 2 multipoint connections
- Mono
- Smartphone friendly
- 3 hour charge time, 13 hour usage time
- 220 hour standby time
- Built in rechargeable Li-Po Battery
- Weight: 42g



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	AA-2080	\$44.95	\$40.45	\$35.90

MEGAPHONE

10 WATT MULTIFUNCTION MEGAPHONE WITH MESSAGE RECORDER & TORCH

Get your message across loud and clear with this megaphone. Battery operated, simple to operate and outputs up to 10WRMS. It features a volume control, alarm and whistle function to get attention and has a built in message recorder which allows you to replay announcements repeatedly. It even has a 3W high power LED torch for night time search and rescue applications. Ideal for sporting events, crowd control, peaceful rallies, or when evacuating a building.

- Strap included

Specifications	
Power output	10WRMS
Sound level of horn	110-115dB
Requires	8 x AA batteries
Dimensions	270 (L) x 162(W) x 235(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AM-4055	\$79.95	\$71.95	\$63.95

PORTABLE PA

PORTABLE WIRELESS PA AMPLIFIER & MICROPHONE

The system consists of a compact yet powerful amplifier with a built in crystal locked radio receiver and a wireless microphone. The system is equipped to accept a wired microphone and an auxiliary music source. The wireless microphone transmitter has an on/off/stand-by switch, microphone jack, and sensitivity control. An audio output socket is also provided. A sensitive microphone is included and is attached to a small ear hook gooseneck that allows hands free operation. The amplifier runs on an internal 12V rechargeable battery or 240VAC mains.

- 20WRMS output
- 6 inch speaker
- 100Hz to 16kHz bandwidth
- Dimensions: 305(H) x 182(W) x 125(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
6" 20WRMS	AM-4075	\$109.00	\$89.95	\$79.95

PUBLIC ADDRESS SPEAKER SPARES

TOP HAT ADAPTOR 35 - 15MM

Adapts a 35mm top hat mount to 15mm.

- Suits portable PA amps, speaker bins etc.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	CW-2863	\$8.95	\$7.95	\$6.95



PORTABLE PA SYSTEMS

PARTY & PUBLIC ADDRESS (PA) SPEAKERS

6.5" RECHARGEABLE SPEAKER WITH MP3 PLAYER & BLUETOOTH® TECHNOLOGY

An affordable and versatile portable PA speaker. It comes with an internal rechargeable battery to power the on-board amplifier, producing a respectable 20WRMS through the 6.5" full range speaker. It features Bluetooth® functionality for streaming audio tracks from your Smartphone, Tablet or laptop. Alternatively, you are able to insert a USB or SD memory card to play MP3 tracks or plug in an auxiliary sound source. A microphone socket is provided, perfect for jam and karaoke sessions, lectures, tour groups and street performance. The speaker also features an FM radio, digital display and rugged ABS housing with moulded handle on top, making it easy to carry.

- USB/SD/AUX input
- FM radio
- Bluetooth® support
- Volume/Treble/bass control

Specifications	CS-2541
Speaker	6.5" coaxial driver
Output power	20WRMS
Frequency response	65Hz to 20kHz
Battery	12V 4.5Ah Sealed Lead Acid
Usage time	8 hours
Charge time	10 hours
Dimensions	325(L) x 221(W) x 217(D)mm



NEW
2015



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
6.5"	Each	CS-2541	\$149.00	\$133.95	\$118.95

6.5" RECHARGEABLE PA SPEAKER WITH UHF MICROPHONE, MP3 PLAYER & BLUETOOTH® TECHNOLOGY

This portable rechargeable 6.5" PA speaker suits a variety of indoor and outdoor applications from wedding or birthday celebrations to school events. It can play MP3 music files from a USB and SD card, or music streamed from a Smartphone, Tablet or PC via Bluetooth®. There is a wireless UHF microphone included, perfect for jam and karaoke sessions, lectures, tour groups and street performance. Integrates a rechargeable battery, providing a run time of up to 4 hours. Other features include wired microphone input, 3 channel mixer, reverb and 6.35mm line output. Moulded into a rugged ABS housing with moulded handle.

- USB/SD/AUX input
- Bluetooth® support

Specifications	CS-2543
Speaker	6.5" full range
Output power	20WRMS
Amplifier	Class-D
Frequency response	62Hz to 18kHz
Battery	12V 2Ah Sealed Lead Acid
Charging time	8 hours
Working time	3 - 4 hours
Reverb	Echo
Power Supply	AC Input voltage 110V-240VAC
Dimensions	325(H) x 225(W) x 220(D)mm
Weight	4.5kg



NEW
2015



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
6.5"	Each	CS-2543	\$269.00	\$245.00	\$219.00

8" RECHARGEABLE PA SPEAKER WITH UHF MICROPHONE

An all-in-one compact mobile wireless sound system perfect for parties, schools, auditoriums or a street performance. UHF wireless receivers are built-in and it includes one lapel type microphone and UHF belt pack transmitter. It can also function as a music player in a number of ways.

There is a 3.5mm socket for connecting other MP3 players or Bluetooth® connectivity for wireless playback. It also has a built in MP3 player so just plug in a USB drive or SD card loaded with MP3s and it can play them back. It includes rechargeable batteries with a run time of about 6-8 hours so you can set it up in a flash and keep it running for the duration of the performance, speech, or hoedown.

The unit can be recharged with the supplied IEC power cable.

Features an attractive perforated steel grill cover that is powder coated.

- Bluetooth® wireless technology
- USB and SD card slots for MP3 playback
- Pole mount socket (no mounting hardware included)



Specifications	CS-2510
Max output power	40WRMS
Frequency response	62Hz - 18kHz
Speaker drivers	LF: 8" (200mm) cone, HF: " (25.4mm) Compression driver
Audio inputs	XLR for microphone, 1/4" for instrument, RCA for CD player, 3.5mm stereo input
Audio output	6.3mm (1/4") phone jack for recorder
Recharge time	5 hours
Usage time	6-8 hours
Weight	8kg
Dimensions	320(W) x 310(D) x 455(H)mm



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
8"	Each	CS-2510	\$379.00	\$345.00	\$305.00

PARTY & PUBLIC ADDRESS (PA) SYSTEMS (CONTINUED)

8" ACTIVE PA SPEAKER

A compact but powerful 8" Active PA Speaker. This ultra-compact and lightweight speaker delivers superb audio clarity and power needed for your next party, event, conference, etc. The rugged injection moulded case incorporates handles on either side for portability and also has a secured speaker mounting hole on the bottom. It has RCA line level, XLR and 6.5mm microphone inputs and also features volume, bass and treble controls. 240VAC mains powered and is supplied with IEC lead.

Specifications	CS-2482
Output power	80WRMS
Voltage	Mains powered
Frequency range	65Hz - 20kHz
Sensitivity	92dB
Dimensions	380(H) x 220(W) x 195(D)mm



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
8"	Each	CS-2482	\$149.00	\$133.95	\$118.95

PORTABLE PA ACTIVE SPEAKER

Our new range of active PA speakers just got even better and more importantly, more affordable. One of the great hassles with serious PA gear is having to moving them gig to gig. Our new range of Active PA speakers now come with a retractable handle and luggage wheels, so you can move them with ease without throwing your back.

These 2 way active PA speakers still produce great clarity and powerful bass through their long throw woofers and efficient compressions drivers. Feature strong and durable moulded enclosures and tough metal grille to protect the drivers, and now feature a Bluetooth® smart device for wireless audio streaming from your computer or Smapthone. Alternatively, you may use the USB or SD card slot to directly play your MP3 files. It also has RCA line level, 6.5mm microphone and balance XLR inputs.

- Represent great value for money
- Ideal for DJ, PA, schools, sporting events, churches, wedding, conferences, etc.

Specifications	CS-2483	CS-2484	CS-2486
Power	100WRMS	150WRMS	180WRMS
Voltage	Mains powered	Mains powered	Mains powered
Frequency response	25Hz - 20kHz	20Hz - 20kHz	18Hz - 20kHz
Sensitivity	96dB	96dB	98dB
Impedance	8 ohms	8 ohm	8 ohm
Dimensions	550(H) x 370(W) x 300(D)mm	600(H) x 410(W) x 320(D)mm	680(H) x 470(W) x 390(D)mm



↑		Cat.	Qty 1+	Qty 2+	Qty 4+
10"	Each	CS-2483	\$249.00	\$225.00	\$198.95
12"	Each	CS-2484	\$299.00	\$269.00	\$239.00
15"	Each	CS-2486	\$369.00	\$329.00	\$299.00

15" PORTABLE ACTIVE SPEAKER WITH DUAL UHF MICROPHONES

A multi-function portable active speaker with a myriad of functions. This 2 way active speaker has a built-in dual channel wireless UHF microphone system that meets the new standards, and 2 hand held microphones are supplied that neatly tucks in the side of the speaker when not in use. The sound is reproduced with crystal clear quality through its 15" long throw woofer and high efficiency compression driver. The rugged plastic case integrates a telescopic handle and luggage wheels that allows you to move from places without the risk of injuring your back.

Also includes an SD and USB card MP3 player, RCA line and 6.5mm inputs. Has level, volume, bass and treble controls to fine tune the sound. A truly feature packed and versatile speaker.

It can be used in karaoke parties, street performances, conference, churches, wedding functions, real estate agent auctions, business promotions, etc. The applications are endless.

Specifications	CS-2490
Power	100WRMS
Voltage	Mains powered
Frequency Response	50Hz - 20kHz
Sensitivity	96dB
Impedance	4 ohm
Dimensions	690(H) x 440(W) x 430(D)mm



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
15"	Each	CS-2490	\$479.00	\$429.00	\$385.00

PORTABLE PA SYSTEMS & MIXERS

PARTY & PUBLIC ADDRESS (PA) SYSTEMS (CONTINUED)

12" & 15" PA PARTY SPEAKERS

Great quality and performance at very affordable prices. Incorporates long throw woofers and efficient compression drivers to deliver superb clarity and powerful bass notes. These rugged and durable plastic speakers have metal protective grilles and are supplied with a telescopic handle and luggage wheels for ease of portability. Perfect for parties, DJ applications, churches, conferences, etc. Match with our Digitech home component amplifiers (AA-0470 & AA-0484) for home party use or our rack mount amplifiers (AA-0477 & AA-0479) for professional PA applications.

Specifications	CS-2487	CS-2488
Power	150WRMS	180WRMS
Frequency Response	20Hz - 20kHz	18Hz - 20kHz
Sensitivity	96dB	98dB
Impedance	8 ohm	8 ohm
Dimensions	600(H) x 410(W) x 320(D)mm	680(H) x 470(W) x 390(D)mm

↑		Cat.	Qty 1+	Qty 4+	Qty 10+
12"	Each	CS-2487	\$149.00	\$133.95	\$118.95
15"	Each	CS-2488	\$199.00	\$178.95	\$158.95



10" PA SPEAKER SYSTEM WITH 2 CHANNEL UHF MICROPHONES

This is a feature-packed, compact, lightweight portable PA system, which includes 2 x 75WRMS speakers, 6-channel mixer and 2 x Wireless UHF microphones. Its weight has been optimised through a clever use of PP plastic, while the Class D amplifier leaves its performance uncompromised. The mixer features peak indicator and a variety of controls to fine-tune the audio frequency range. It plays MP3 via Bluetooth® Technology, a SD card or a USB flash drive. The PA system can also be used as an instrument amplifier. Transportation is easy; the mixer neatly locks into place behind one speaker while the other serves as storage for your microphone and cables.

- UHF Microphone Frequencies: - CH 1: 521.7 MHz - CH2: 550.3 MHz
- Class D amplifier
- 6 channel mixer - each channel has a peak indicator, treble, bass, effect and volume controls
- Accepts a SD card or USB flash drive for MP3 playback
- Use with a balanced or unbalanced mic or with an instrument
- Mains powered

Specifications	CS-2565
Power	2 x 75WRMS
Frequency range	50Hz - 20kHz
Dimensions	475(H) x 320(L) x 320(W)mm



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
10"	Each	CS-2565	\$549.00	\$495.00	\$439.00

DJ EQUIPMENT

3 CHANNEL MINI MIXER WITH USB INTERFACE

This 3 channel mini portable USB mixer suits a small home studio or on-the-go recording enthusiast. Its compact size doesn't clutter your desk space, and also makes it easy to carry to other studios or venues. Power using the supplied mains power adaptor or from the USB port of a computer. Supplied with mains power adaptor and USB lead.

- Ultra-compact and ultra-low noise analogue mixer with USB/Audio interface
- Built-in stereo USB/Audio interface to connect directly to your computer
- State-of-the-art Mic Preamp comparable to stand-alone boutique preamps
- 2-band graphic EQ for warm and musical sound
- 2-Track input assignable to Headphone or Main Mix output
- Main Mix plus separate Phones output
- High-quality components and exceptionally rugged construction ensure long life
- Runs on phantom power

Specifications	AM-4208
Operating System	Windows® 2000, XP® or higher, Mac® OS 9.0.4, 10.X or higher.
Power supply	USB connection, adaptor (5VDC, 500mA)
Power consumption	2.5W
Dimension	144(L) x 100(W) x 42(H)mm
Weight	0.45kg



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
3 Channel		AM-4208	\$89.95	\$80.95	\$71.95

2 CHANNEL PRO DJ MIXER

The ideal mixer to learn on. Two channels each with RCA inputs for CD or other line level source and a set of dedicated phono inputs. The BPM counter is capable of accurately measuring the beats per minute of almost any kind of dance music automatically. This function includes a digital indication that allows you to confirm the tempo of the current selection at a glance and takes the guesswork out of comparing the beats of different selections. This provides quick and easy beat matching, and then using the 2 band EQ on each channel you can seamlessly mix in the next track. The BPM counter works equally well when monitoring a CD player and other digital sources or analogue sources such as a turntable.

- Level meters on each channel
- 2 band EQ on each channel
- Phono and line level inputs
- Mic and headphone outputs
- Effects loop
- Line level preamp outputs
- Selectable CF curve
- Dimensions: 330(W) x 22(H) x 102(D)mm



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
2 Channel		AM-4206	\$149.00	\$133.95	\$118.95

SPECIAL FX

BUBBLE MACHINE

Enhance the atmosphere at your next party or special event with this affordable bubble machine. It has an easy to use on/off switch on the unit and can be operated two ways: by mains power adaptor (included) or with batteries for portable application (Requires 2x C batteries, not included).

- For best results, use our Bubble Mania bubble liquid Cat. AB-1222 (946ml)



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Bubble Machine	AB-1220	\$34.95	\$31.45	\$27.90
Bubble Liquid	AB-1222	\$6.95	\$6.25	\$5.50

RAVE FOG MACHINE

This tough fog machine will add the extra dimension to any mobile DJ setup, home party or disco lighting - with laser light shows, mirror balls and other party lighting coming out in full effect. The unit produces clouds of white fog on demand with the use of an illuminated 3m wired remote control. Features an adjustable mounting bracket, tough metal construction and fluid gauge.

- 240VAC operation
- 70 cubic metres/min fog output
- 800ml fluid capacity
- 330(L) x 160(W) x 140(H)mm
- Fog juice sold separately (AF-1212)



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Fog Machine	AF-1214	\$99.95	\$89.95	\$79.95
Fog Juice 1 Litre	AF-1212	\$17.95	\$15.95	\$14.35

DMX FOG MACHINE

The ambience and mystique associated with fog and mist is excellent at nightclubs, parties, and spooky film re-enactments. This unit gives you a range of control options which include the ability to set the machine to burst fog for specific durations at certain intervals as well as to manually trigger with the supplied remote control. But the real standout feature is the support for DMX. Hook this up to your DMX512 controller and fog will waft out with the beats allowing total customisation over your stage or party effects.

- Tank capacity: 1.2L
- Remote included
- Dimensions: 335(L) x 150(W) x 186(H)mm



Fog juice to suit - AF-1212 (available separately)



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Fog Machine	AF-1213	\$149.00	\$133.95	\$118.95
Fog Juice - 1 Litre	AF-1212	\$17.95	\$15.95	\$14.35

STRAWBERRY ESSENCE SCENT FOR FOG MACHINES

Strawberry essence additive that provides a more desirable smell to your fog machine. Just add a few drops to the fog juice container on your fog machine, and hey presto, strawberry scented fog!



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
20ml	AF-1211	\$16.95	\$14.95	\$13.35

PARTY LIGHTING - MANUAL CONTROL

ROTATING DISCO BALL WITH LED SPOTLIGHTS

Create an amazing light show by hanging these lights on the ceiling to get the desired mood on your next party. Turn on and dance the night away with this brilliant mirror ball and LED spotlights station. It features an automatic rotating mirror ball, two adjustable angle spotlights with 6 red, green and blue LEDs each. It also has an additional 4 red and blue LEDs on the base for maximum effect.

- Mains power adaptor included.
- Dimensions: 260(L) x 130(W) x 230(H)mm

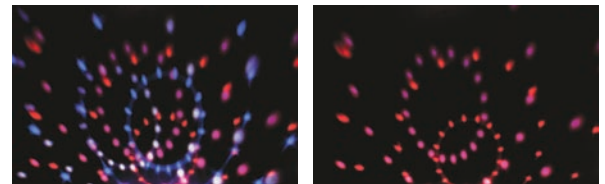


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
LED RGB	SL-2916	\$34.95	\$31.45	\$27.90

ROTATING LED MINI LIGHT WITH DMX CONTROL

Add some light and colour to your next party or function with this multi-coloured LED rotating light. It features 6 x different coloured LEDs covered by a transparent plastic dome with hexagonal patterns to help create a eye catching display. The dome remains stationary while the LEDs spin inside. Features DMX512 input and output ports which will give a huge amount of control or automation on the rotation of the light. You can also switch it to auto mode so the light automatically oscillates depending on the music.

- The ball features a moulded mounting bracket with screw holes for installation in almost any location.



Specifications	SL-3456
LED colours	Red, Green, Blue, Yellow, White, Purple
3 Control modes	Sound activated, DMX512, Remote control
Input voltage	90-240V 50/60Hz
Light power	30W>
Dimensions	175(Dia) x 140(H)mm

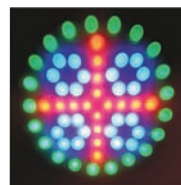


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Rotating	SL-3456	\$54.95	\$49.45	\$43.90

RGB LED DISCO LIGHT

A compact sound activated RGB LED party light that will help to create a fantastic atmosphere for any special event or occasions. It can be operated automatically to create very bright coloured patterns in red, green and blue with 61 LEDs.

- Highly portable and durable this party starter is great for mobile or permanent installations.



NEW LOW PRICE



Specifications	SL-3441
Mains supply	240VAC
Power consumption	10W
Dimensions	200(L) x 108(W) x 160(H)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3441	\$69.95	\$62.95	\$55.95

PARTY & CONCERT LIGHTING

LASER LIGHTS

RED/GREEN MINI LASER LIGHT SHOW WITH RGB LED

A mini laser light show that doesn't skimp on features. It includes a full colour RGB LED that adds vibrancy and substance to each laser pattern by cycling through various colours with each show. With the remote control you can cycle through patterns, modes, switch between red or green lasers, adjust the speed and more. It also has a microphone so when positioned near a speaker in auto mode the display will change in sync with the music.

A built in bracket and tripod with flexible legs is included for mounting onto AV gear or for simply standing on a desk.

An easy to use laser light show great for restaurants, foyers, or parties.



Specifications	SL-3453
Light modes	Static, rotate clockwise/counter-clockwise, blink
Control modes	Sound activated/automatic
Patterns	Star-field, flowers, rotating parallel dots, quasars, alternating dots, star-shapes
Power supply	240VAC, 50Hz
Dimensions	140(L) x 105(W) x 55(H)mm



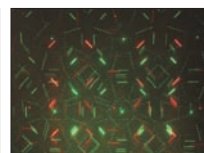
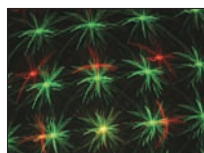
↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Mini Laser	SL-3453	\$129.00	\$115.95	\$102.95

SMALL RED/GREEN LASER LIGHT SHOW

A small and simple Red/Green laser light show for adding colourful ambience to a room.

Includes a mounting bracket and flexible tripod stand (that's also great for camera mounting!).

The remote control can adjust the mode, pattern, speed, and lets you switch between red/green/both colours.



Specifications	SL-3455
Patterns	Dots, joining dots, exploding dots, tron dots
Modes	Fast, slow, medium
Power supply	240VAC 50Hz
Dimensions	365(W) x 145(D) x 70(H)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Laser	SL-3455	\$99.95	\$89.95	\$79.95

STAGE LIGHTING

18 X 1W RGB LED PAR STAGE LIGHT

Add some colour to your stage or next party with these par lights. Each light features super bright LEDs that can change colour between white, red, green and blue, which can be controlled using the built-in program, sound activation via the built-in microphone, from the included slim remote control, or from a DMX controller (available separately). The supplied bracket allows you to mount the light permanently or placed on a table for temporary use.

Two models to choose from.

- DMX512 control
- Mains powered
- Fan cooled

Specifications	ST-3600/ST-3602
LED colours	Red, Blue, Green and White
Control modes	Sound Activation, Built-in program, master-slave, and remote control
Dimensions	175(L) x 175(H) x 105(D)mm
Weight	930g



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
18 x 1W LEDs	ST-3600	\$74.95	\$67.50	\$59.95
7 x 4W LEDs	ST-3602	\$119.00	\$106.95	\$94.95

POWER LIGHT "PARTYBAR" KIT

This unit consists of a sturdy metal stand that deploys from 1.3m to a massive 2.15m (over 7 feet.) The light bar fits perpendicularly to the stand which holds 4 x gymbal mounted high efficiency multicolour par light units 250mm Dia. with 3 LED lamps in each. The entire system is connected together with leads (supplied) and connected to a foot-operated controller. Supplied with Mains (240V) connector, T-bar, stand, footswitch and carry bags.

- Ob-3 channel control & 15 DMX channels.
- 12 built-in auto programs.
- Easy trigger-music activated mode
- Easy to break down at end of gig
- Creates superb colour wash effects
- Variable flash rate
- Light bar dimensions: 910(L) x 242(H) x 48(D)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Party Light Bar Kit	SL-3469	\$339.00	\$305.00	\$269.00

PARTY LIGHTS & SPOTLIGHTS - DMX CONTROLLED

LED MOVING HEAD STAGE LIGHT WITH DMX CONTROL

An LED moving stage light with 7 extremely powerful LED lights that produce a colour combination of red, green, blue and white. Select between automated colour pattern, sound activated or DMX controlled. The head can pan 360° and tilt 180°, and the light features changeable electronic strobes and dimmer functions.

Ideal for small stage lighting, club and party applications.

- Mains powered
- Pan/tilt invert options
- 18 DMX channels

NEW
2015



Specifications	ST-3604
Power consumption	80W
Light source	7 x 10W RGBW (4 in 1)
Beam Angle	45°
Play mode	Sound, Auto, DMX512, Master/Slave
Power cable length	1.5m
Dimensions	240(H) x 177(L) x 177(W)mm
Weight	2.8kg

⬆	Cat.	Qty 1+	Qty 5+	Qty 10+
LED RGBW	ST-3604	\$369.00	\$335.00	\$299.00

LASER LIGHTS - DMX CONTROLLED

DMX POWERED LASER BEAM

Unleash a barrage of atmosphere creating lasers at your next party, concert, or stage production. This model features an XLR out plug that allows you to daisy-chain multiple units together for full DMX controlled visceral ambience. Of course a single unit can also be controlled if your requirements aren't so intense. There's also a mic at the front so you can sit the unit near a speaker for auto laser mode. Dip switch at the rear allows control of sound active mode, auto mode, and to switch DMX addresses on or off. Mount to your speaker stand or other frame work with the supplied bracket.



Specifications	SL-3451
Laser colour	Red, Green
Sound control	Auto, DMX 512 (7 channels)
Laser patterns	More than 64 laser patterns
Power supply	240VAC 50Hz
Dimensions	363(L) x 143(W) x 67(H)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Laser DMX	SL-3451	\$229.00	\$209.00	\$182.95

STAGE LIGHTING

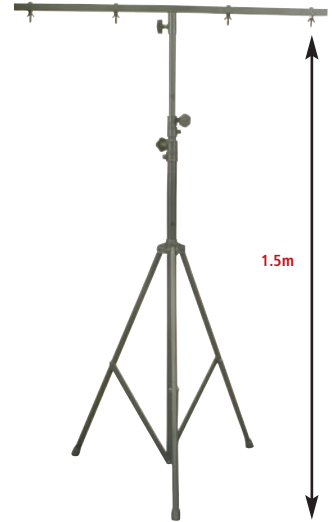
LIGHTING STAND

This strong and sturdy lighting stand will extend from a minimum height of 1,530mm to a maximum of 3,650mm and is designed to carry up to 20kgs on the square section cross tree.

An integrated tripod support has collapsible legs that extend up to 750mm from the centre line of the stand, giving an overall base of 1,500mm which provides good stability even when the stand is fully extended.

The cross tree has 4 bolts for attaching up to 8 Pin Spots or other attachments.

The entire stand is finished in matt black.



1.5m

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	CL-2800	\$109.00	\$89.95	\$79.95

LIGHT CLAMP

Used to secure the pinspot lights to a mounting stand.

- Gap size: 0 - 70mm
- Dimensions: 78(L) x 45(H) x 30(D)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-2969	\$5.95	\$5.25	\$4.75

DMX512 EXPLAINED

DMX or DMX512 is a communications protocol used for controlling devices in stage and theatrical applications. It is used to transmit digital multiplexed signals – DMX stands for Digital Multiplexed Signals. The DMX protocol is simple, robust and reliable.

DMX512 provides up to 512 control channels per data link. It can be seen as 512 sliders on a lighting console, connected to 512 light bulbs. Each slider's position is sent over the data link as an 8-bit number having a value between 0 and 255. The value 0 corresponds to the light bulb being completely off while 255 corresponds to the light bulb being fully on.

A technician would use a DMX512 setup to control lights, dimmers, fog machines or any other DMX-compatible device connected to the data stream.

To learn more visit the Primers section on the Jaycar website

LET'S FIND EVERYTHING YOU NEED!

DMX CONTROLLERS

5 CHANNEL DMX LED LIGHT CONTROLLER

This compact 5 channel DMX LED light controller requires little set up and no programming necessary. It is fully compatible with our range of PAR spotlights, great for parties or stage lighting set ups. The controller allows you to create colourful scenes and amazing lighting effects. This unit is a good all round controller giving strobe and basic dimming effects. It also features six selectable modes with a combination of RGB colour mixing, fading, chasing and sound control.

- 5 channels
- 9VDC plugpack and microphone cable included
- Power consumption: 4.5W
- Weight: 1.15kg
- Dimensions: 258(L) x 123(W) x 55(H)mm



NEW
LOW
PRICE



↑	Cat.	Qty 1+
	SL-3423	\$49.95

19" RACK MOUNT DMX CONTROLLER

DMX or to be technical, DMX512, can add enormous capabilities to a stage, lighting, party or DJ setup. The DMX protocol is able to control multiple compatible devices, such as lights, dimmers, fog machines or laser shows with programmable sequences or scenes. For each scene you can program multiple parameters like fade, pan, strobe, colour etc. limited only by the capabilities of the actual DMX devices being controlled; save and play back each scene in the sequence your production requires. Rack-mountable and mains powered. See the Primers section of our website for more DMX information and programming tips.

- Control up to 12 devices
- 16 channels per device
- Standard 19" rack mount
- 3U rack space
- 9V plugpack included
- Dimensions: 482(W) x 133(H) x 70(D)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3429	\$149.00	\$133.95	\$118.95

STROBES

RECTANGULAR STROBE LIGHT - 24 LED

LEDs haven't always been a suitable alternative for illumination, accent and other general lighting application. However recent developments in production of high intensity LEDs and the ever decreasing price has allowed for these energy efficient and long lasting light source to make their way to consumer orientated lighting products. This strobe light has super high intensity LEDs, that will add the necessary life to any party and produce an eye catching array of lighting effects to attract attention.



- Can be set to flash at a slower fast rate and are supplied with adjustable brackets for optimal positioning.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-2895	\$19.95	\$17.70	\$15.70

MINI STROBE LIGHT - XENON

This unit uses a xenon flash tube and has a variable flash rate up to 10Hz.

- Operates on 240 VAC
- Supplied with a 1.7m cable
- Domestic use only
- The unit is housed in a compact case measuring 85(W) x 50(H) x 125(D)mm and is fitted with an adjustable mounting bracket



NEW & IMPROVED

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-2990	\$24.95	\$22.35	\$19.70

74 WHITE LED STROBE LIGHT

This mains powered mini strobe features 74 super bright white LEDs with adjustable flash rate and sound activation. It is made from a strong plastic to keep the weight down to just 0.4kg and is supplied with mounting hardware. Energy efficient and long lasting party light ideal for domestic use.



- 74 super bright white LEDs
- Adjustable flash rate
- Dimensions: 140(L) x 120(Dia.)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3464	\$49.95	\$44.90	\$39.90

EFFECT LIGHTING

40 WATT BLACKLIGHT FLUORO TUBE



Used extensively for live music, discos, night clubs, and great for parties. At our new low prices, you can now afford them.

- Requires standard 40 Watt fluoro fitting.
- Dimensions: 1225(L) x 25(Dia.)mm.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3152	\$29.95	\$26.90	\$23.70

MINI ULTRA-VIOLET FLUORO LIGHT WITH TORCH

Use to detect counterfeit currency, to check for fake ID, gemstone and mineral inspection, or to just have fun by making objects glow. Includes small white spotlight.

- 4W UV lamp
- Hand carry strap
- Requires 4 x AA batteries
- Dimensions: 160(L) x 52(D) x 23(W)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	SL-3146	\$14.95	\$13.35	\$11.70

WORLD BAND & DAB+ RADIOS

9 BAND FM/MW/SW POCKET RADIO

A powerful little radio capable of receiving FM/MW/SW1-7 bands. Features full clock functions, an alarm, antenna, and a 3.5mm headphone jack for personal listening. Also features a handy fold-out stand so it can sit on a table at a comfortable viewing angle.



Specifications	AR-1736
FM	88 - 108MHz
MW	530 - 1600kHz
SW	5.80 - 17.90kHz
Connections	3.5mm headphone jack
Power	2 x AA batteries or 3VDC plugpack (available separately)
Dimensions	110(L) x 70(H) x 24(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1736	\$24.95	\$22.35	\$19.70

AM/FM/SW RECHARGEABLE RADIO WITH MP3

A tri-band compact, portable AM/FM/SW radio with built-in MP3 player and digital clock. Listen to your favourite local AM/FM stations or international programs on the SW band. You can also connect a USB drive or microSD card and listen to MP3 tracks. Features a blue backlit LCD for easy use in the dark. No need to buy batteries, it has a built-in rechargeable Li-ion battery inside and charges via the supplied USB cable. Also features a 3.5mm headphone jack for private listening.



- Supports USB flash drive and MicroSD card (32GB max)
- 3.5mm headphone jack
- Built-in high quality rechargeable Li-ion battery (BL-5C 3.7V 850mAh)
- USB charge cable supplied
- Dimensions: 114(L) x 70(H) x 25(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1721	\$29.95	\$26.90	\$23.70

WORLD BAND AM/FM/SW/LW/AIR PLL RADIO

A PLL world band radio loaded with a great list of features but easy to operate. Select from 5 available bands, FM, AM(MW, with 9 or 10k step), SW, LW and AIR bands. Tune to a desired frequency using the fast or slow scroll function and store up to 500 of your favourite radio stations.

- 500 programmable memory bank
- Sleep function up to 120 minutes
- Manual, auto, or preset station search
- Battery indicator
- Includes carry case
- Lock button



Specifications	AR-1733
AM(MW coverage)	522 - 1620 kHz(9k) 520 - 1710 kHz(10k)
FM coverage	87.5 - 108.0MHz
SW coverage	2300 - 26100Hz
LW coverage	153 - 279kHz
AIR coverage	118 - 137MHz
Power	Requires 2 x AA batteries
Dimensions	120(W) x 75(H) x 30(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1733	\$74.95	\$67.50	\$59.95

TECH TIP

WHAT IS WORLD BAND?

World Band Radios are those radios that are capable of tuning into radio programs generated by, say the British BBC, Radio Australia (Australian ABC Radio programs), Voice of America, Radio Vatican, etc. These programs are transmitted on a regular weekly basis in any one 24 hour period. It is generally preferable to use 24 hour time, linked to GMT (Greenwich Mean Time) which is the time it is in London (UK) so that confusion is eliminated as when the program is broadcast.

There are dozens and dozens of programs from countries all over the world in the special languages of these countries. For example if you are an Australian citizen but originally from Greece, you can tune into stations that enable you to keep your knowledge of the language up to date. The stations typically have a lot of local news which you would normally not hear.

The World Band stations are generally broadcast in several frequencies at the same time, typically between about 1.8MHz & 29.00 MHz, especially between 7 & 21MHz. You can look up the broadcasting details on Google etc.

PHASE-LOCKED LOOP (PLL)

Phase-Locked-Loop is a circuit configuration invented over 80 years ago. Originally the circuit was so complex that it only appeared in expensive radios. With modern microchip technology, the PLL got a lot cheaper. The benefits of PLL technology enabled receivers to remain on a station frequency with great accuracy. The radio circuit did not 'drift.' PLL technology, though still not cheap, is a hallmark of quality short wave radios and that's why Jaycar specifies them.

WORLD BAND & DAB+ RADIOS (CONTINUED)

WORLD BAND AM/FM/SW PLL RADIO

Truly an ideal radio for the casual user and the enthusiast. It offers FM, MW(AM) stations and three Short Wave (SW) stations which range from 1,711kHz to 29,999kHz for receiving international broadcasts. The analogue tuning is assisted with a digital display and a tuning step, select fast for scrolling through the frequency or slow for that fine adjustment. Uses a Phase-Locked Loop (PLL) to ensure a stable reception. This unit is built with high performance IC's and MOSFET's that provide high sensitivity, strong anti-interference, low background noise and distortion. Includes a large back lit LCD displaying the frequency, clock, battery level and signal strength indicator. Other features includes AM RF gain, AM bandwidth switch, internal/ external antenna switch, Local/DX antenna switch, IF out, total of 50 presets - 10 presets for each band (AM/FM/SW1/SW2/SW3), alarm function, snooze button, button lock, and the list goes on. Power options are 6 x AA (not included) used with supplied 6 x D size battery adaptors, 6 x D batteries (not included) or the supplied 9V PSU. Supplied with a carry strap.

- Large back lit LCD
- RF gain control
- Bass & treble controls
- Key lock
- IF output
- Line in and out
- Earphone socket
- Speaker 5W/4 ohms
- Local/DX antenna switch
- External antenna connection
- Internal full range speaker
- Mains or battery operated

Specifications	AR-1748
FM	87.5-108.0MHz
MW(AM)	522-1620kHz (9kHz); 520-1710kHz (10kHz)
SW	1,711-10010kHz; 9,990-20,010kHz; 19,990-29,999kHz
Dimensions	310(W) x 195(H) x 100(D)mm



	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
World Band AM/FM/SW PLL Radio	AR-1748	\$159.00	\$142.95	\$126.95
Shortwave Passive Reel Antenna to Suit	AR-1947	\$19.95	\$17.95	\$15.70

WORLD BAND RADIO WITH AM/FM, SW & DAB+

A feature rich world band radio that covers FM/AM/LW/SW frequencies as well as DAB+ digital radio. It utilises a PLL synthesized receiver for a high level of stability so it stays locked to the station you have chosen without interruption to the receiving signal. It's capable of picking up international radio stations on the SW band and supports the Radio Data Stream (RDS) function for receiving digital information. You can change the frequency with the sensitive tuning dial or key in the frequency directly with the 0-9 keypad. Tuning step can be adjusted between fast, slow and stop for fine adjustments. The easy to read LCD will display frequency, time, and RDS. It can store 480 stations in memory with 20 preset DAB+ stations. There's also a 3.5mm headphone output socket for private listening and RCA line out and in. Includes a telescopic antenna. Requires either 4 x 1.5V C size batteries or 9VDC plugpack.

- Clock/snooze/sleep/alarm function
- Key lock button
- World/local time selection
- Tuning selection (fast/slow/stop)
- Keypad direct entry (0-9)
- ATS Function
- Telescopic whip antenna
- 9/10k step & 12/24 hour selection
- Auto/manual tuning
- Dual alarm (alarm A & B) selection
- Stereo/mono
- Wide/narrow bandwidth selection
- DAB/DAB+/RDS function
- Electronic volume up/down
- 480 memory slots (DAB+ 20 presets)
- Built-in charging circuit
- Large LCD (time, frequency, RDS)
- Line in/line out
- 3.5mm headphone output



Note: Not all regions are capable of receiving DAB+.

Frequency coverage	AR-1946
FM	87.5-108MHz
AM	522-1620kHz (9k)
AM	530-1710kHz (10k)
LW	153 - 279MHz
SW	2.3-26.1MHz
DAB+	174.928 - 239.200MHz
Dimensions	294(W) x 175(L) x 76(D)mm



	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
World band Radio DAB+	AR-1946	\$219.00	\$196.95	\$174.95

WORLD BAND AM/FM/SW/AIR PLL SYNTHESISED RECEIVER WITH SSB

Ideal for a novice ham radio licensor, keen fisherman or even just the outdoors type, this radio has everything you will ever need in a radio with the added function of single-sideband modulation (SSB). SSB is used to obtain current weather reports, so it is perfect to take to sea to avoid changing weather conditions. However with great FM and AM coverage and battery operation it is also perfect for camping, BBQs and thanks to its world/local time selection clock and alarm, it can even be used as an alarm clock! Additional features include auto tuning saving, 500 memories and keypad direct entry. This is certainly a radio of many uses! Power options are 6 x AA (not included) used with supplied 6 x D size battery adaptors, 6 x D batteries (not included) or the supplied 9V PSU. Supplied with a carry strap.

- Large back lit LCD
- RF gain control
- Bass & treble controls
- Key lock
- IF output
- Line in and out
- Earphone socket
- Speaker 5W/4 ohms
- Local/DX antenna switch
- External antenna connection
- Internal full range speaker
- Mains or battery operated

HAS SSB!

Specifications	AR-1945
FM	87.5-108.0MHz
MW(AM)	522-1620kHz (9kHz); 520-1710kHz (10kHz)
AIR/SW	118 - 137MHz / 1799-29,999kHz
Dimensions	310(W) x 195(H) x 100(D)mm



SHORTWAVE PASSIVE REEL ANTENNA TO SUIT AR-1748 AND AR-1945
Designed for use with our shortwave radios (model AR-1748 and AR-1945) this reel antenna features two clips that attach to the telescopic rod antenna on the radio to boost reception. It's great for general reception improvement at home, when camping or on the road. When not in use just reel in the clips and it becomes a compact disc shaped package.

- Dimensions: 102(W) x 74(H) x 20(D)
- Max cable length: 7m



	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
World Band Radio	AR-1945	\$209.00	\$178.95	\$158.95
Shortwave Passive Reel Antenna to Suit	AR-1947	\$19.95	\$17.95	\$15.70

TURNTABLES & ACCESSORIES

DAB+ COMPONENT RADIO

DAB+ RADIO COMPONENT

Designed to fit with standard size hi-fi components, this tuner offers a complete future-proof DAB+ radio solution; just sit it on top of your existing hi-fi receiver. Like all DAB+ devices, it displays program, artist, song and station information and has full preset memory functions. Not every station is currently broadcasting on digital, so there's also an FM section with station presets, auto-tuning etc. For anyone who's heard digital radio, the future is as crystal clear as the sound quality.

Specifications	
Outputs	RCA analogue, S/PDIF optical digital
Station presets	6
FM	88 - 108MHz
Dimensions	430(W) x 72(H) x 240(D)mm



NOT AVAILABLE IN NEW ZEALAND

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1753	\$219.00	\$196.95	\$174.95

TURNTABLES

USB TURNTABLE WITH AMP

Copy your LPs, 45s or even 78s straight to your PC, or simply listen to your record collection via the built-in amp and speakers. It also has auxiliary RCA outputs so you can run it to a separate amplifier. Finished in contemporary white piano finish with blue LED accents.

- USB cable and software included
- Contemporary look
- 320(W) x 265(D) x 85(H)mm
- Suits XP, Vista & MAC

USB & Analogue Audio Outputs



	Cat.	Qty 1+	Qty 3+	Qty 6+
USB Turntable	GE-4056	\$84.95	\$76.50	\$67.95
Spare Stylus - Pk 2	GE-4137	\$19.95	\$17.70	\$15.70

5 IN 1 MULTI-FUNCTION STEREO WITH DIRECT ENCODING

The unit is equipped with a full size turntable to play different size LPs in 3 speeds; a CD and cassette player, an AM/FM radio. It also comes with an SD/USB MP3 player and recorder. The recorder allows direct encoding to the USB or SD from the CD or turntable or even copy from USB to SD or vice versa! A truly powerful and versatile unit, crystal clear music is played through a pair of stereo speakers and has RCA line outputs for amplifier or Hi-Fi system integration.

- Belt drive system
- Built-in amplifier
- Amplified output power 2 x 2WRMS
- Stereo speakers - 5 watt @ 4Ω
- Programmable CD memories
- Repeat one/all function
- Bass boost function
- Dimensions: 370(L) x 300(D) x 170(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Music Centre	GE-4132	\$229.00	\$209.00	\$182.95
Spare Stylus - Pk 2	GE-4137	\$19.95	\$17.70	\$15.70

PROPER TRANSCRIPTION-TYPE TURNTABLE WITH AMPLIFIER & AM/FM TUNER

When we thought vinyl was just a gimmick, it was ok to get a cheap turntable. But vinyl has proven to be far more substantial than that with mainstream music becoming available on vinyl again. Now is the time to get a serious turntable, and here it is. This unit is a proper transcription type turntable that has a belt drive, strobe-type speed check, pitch and anti-skating control, and s-shaped arm with high quality cartridge.

Not only that, it comes with a PLL AM/FM Tuner, stereo amp with line inputs, iPod® and MP3 inputs. The amplifier is not very powerful, but it has RCA line out so you can connect it to a bigger amp if you want to bypass the little speakers that come with it. In keeping with this style of product it has a "smoked Perspex" lid, a remote control and even a clock/alarm! 240V Mains powered. This unit represents outstanding value for money as Japanese transcription turntables (without any of the other stuff included above) cost \$400 plus in 1980 dollars 30+ years ago!

We expect to have difficulty keeping these in stock so be quick!



	Cat.	Qty 1+	Qty 4+	Qty 10+
	GE-4142	\$329.00	\$299.00	\$265.00

LET'S FIND EVERYTHING YOU NEED!

CARBON FIBRE RECORD BRUSH

Carbon fibre brushes are the best way to remove surface grit before playing vinyl records.

- Millions of microscopic hairs get into every groove and when you're finished
- Built-in handle has a cleaning bar to get rid of the dust from the bristles.
- Essential for every turntable owner.



	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4051	\$13.95	\$12.35	\$10.95

VIDEO, AUDIO & CD DRIVE BELT

A selection of high quality drive belts for repairs and maintenance of a wide variety of video and audio equipment. The pack contains 25 of the most popular sizes in a combination of square and flat belts. There are 21 square belts ranging from 23mm to 120mm and 4 flat belts covering 56mm to 93mm. Belts lean more towards video use.

D	T	W	D	T	W	D	T	W	D	T	W
23	S	1.7	40	S	1.2	70	S	1.2	93	F	10.0
23	S	2.0	45	S	2.0	71	S	1.2	97	S	1.2
24	S	2.0	56	F	8.0	72	S	1.2	98	S	2.4
24	S	1.2	60	S	1.0	76	F	6.0	114	S	1.8
26	S	1.9	68	S	1.2	83	S	2.0	120	S	1.2
26	S	1.8	70	S	1.0	91	F	5.8	120	S	2.3
32	S	1.2									



D = Inside dia in mm, T = Type (Square or Flat), W = Width in mm

	Cat.	Qty 1+	Qty 3+	Qty 6+
	HP-0650	\$19.95	\$17.70	\$15.70

USB CASSETTE PLAYERS / ENCODERS

CASSETTE TO USB/SD ENCODER/PLAYER WITH CLOCK & RADIO

Bring your 80s and 90s music collection back to life with the multi-function Cassette Player. Digitally encode your old cassette tape collection straight to SD card or memory stick or use as a standard cassette player with its high quality amplified internal speakers. The unit also allows recording directly from a USB drive to SD card or vice versa. This modern & user friendly device also features a crystal clear AM/FM digital tuner, blue back light LCD, alarm clock with sleep & snooze function

- Cassette playback
- USB / SD card reader
- Repeat one / all / Program / Random play
- Blue backlit LCD panel
- AM / FM tuner
- Store up to 40 stations
- Built-in amplifier and stereo speakers
- Line in & Headphone output
- Requires 2 x AAA batteries
- Dimensions: 250(W) x 204(D) x 85(H)mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4139	\$99.95	\$89.95	\$79.95

PORTABLE CASSETTE TAPE TO MP3 ENCODER WITH PC CONNECTION

Dust off your old cassette tapes and rescue your retro-chic 80's and 90's music collection with this tape to MP3 encoder. Simply install the included software to your computer, plug in the encoder via USB and you're ready to digitally convert, restore and archive all your precious cassette music. Digitally remaster the soundtracks of your youth to enjoy and share on CD, YouTube, iPod®, iPhone® etc.

Supplied with USB cable, simple to follow instructions, plus software: Audacity.

- Play, stop, rewind and fast forward buttons
- Small, compact and portable for play and transfer anywhere
- Converts to MP3 or WAV file formats with track recognition
- Includes headphone socket
- PC requires 1 x USB port and 1 x CD drive
- Windows compatible software
- Powered from USB port or requires 2 x AA batteries
- Size: 118(W) x 93(L) x 32(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	GE-4071	\$69.95	\$62.95	\$55.95

HEADPHONES

ULTRA LIGHT STEREO HEADPHONES

Quality headphones at a budget price.

- Terminates to a 3.5mm stereo plug with adaptor to 6.5mm supplied.
- Spare set of muf pads included.

Specifications	AA-2016
Driver diameter	27mm
Power handling	100mW
Nominal impedance	32 Ohms
Frequency response	100Hz - 20kHz
Sensitivity	188dB



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2016	\$7.95	\$6.95	\$6.25

LIGHTWEIGHT HEAVY BASS STEREO HEADPHONES

Designed for extra bass performance.

- Fully adjustable headband & speakers for greater comfort
- Supplied with 3.5mm plug and 6.5mm adaptor

Specifications	AA-2007
Driver diameter	34mm
Power handling	100mW
Nominal impedance	32 Ohms
Frequency response	20Hz - 20kHz
Sensitivity	100dB



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2007	\$14.95	\$13.35	\$11.70

HIGH QUALITY LIGHTWEIGHT STEREO HEADPHONES

Tipping the scales at a meagre 80 grams, these lightweight stereo headphones provide outstanding performance, clarity and comfort. Featuring high output drivers with neodymium magnets, they produce crystal clear sound with crisp highs and smooth bass response.

- Soft leatherette swivel ear pads, adjustable headset and 1.2m lead.

Specifications	AA-2061
Driver diameter	30mm
Power handling	50mW
Nominal impedance	32 Ohms
Frequency response	15Hz - 20kHz
Sensitivity	107dB

A TOP SELLER



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2061	\$24.95	\$22.35	\$19.70

GLOSS WHITE HI-FIDELITY STEREO HEADPHONES

Listen to your favourite music in high fidelity with these affordable and stylish stereo headphones. They can be connected directly to your Smartphone or to Hi-Fi systems like DVD, and CD players. The professional build quality and trendy white gloss finish make these ideal for professional recording engineers, musicians and music lovers. You will love these and not want to use earphones ever again.

Specifications	AA-2120
Frequency Response	10Hz - 20kHz
Max. Input Power	100mW
Plug Type	3.5mm stereo
Cable Length	1.2m cable
Driver Units	38mm



NEW 2015



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2120	\$39.95	\$35.90	\$31.90

GAMING HEADPHONES WITH ADJUSTABLE MICROPHONE

A gaming headset designed for hardcore gamers who enjoy many hours of game-play and demand superior gaming audio, clarity, and bass. They are comfortable and adjust to different head sizes, look great and feature a microphone that swivels 120-degrees. The microphone tucks away out of view when not required. The braided fabric audio lead is over 2m long and incorporates a volume control and mic mute switch.

Headphone	AA-2126
Driver Diameter	40mm
Frequency Range	20Hz - 20kHz
Sensitivity	114dB ± 3dB
Impedance	320hm
Max. Input power	30mW
Microphone	
Mic. Diameter	6.0 x 5.0mm
Sensitivity	-38dB ± 3dB
Directivity	Omnidirectional
Plug type	2 x 3.5mm stereo
Cable length	2m



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2126	\$49.95	\$44.90	\$39.90

LET'S FIND EVERYTHING YOU NEED!

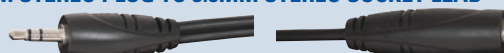
AEROPLANE HEADPHONE ADAPTOR

Use your own headphones in an aeroplane. 3.5mm stereo socket to 2 x 3.5mm mono plug. Suits planes with 2 x 3.5mm sockets.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-3581	\$5.95	\$5.25	\$4.75

3.5MM STEREO PLUG TO 3.5MM STEREO SOCKET LEAD



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	3.0m	WA-7010	\$6.95	\$6.25	\$5.50
	Curly 3.0m	WA-7012	\$8.50	\$7.50	\$6.75
↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	5.0m	WA-7011	\$9.95	\$8.75	\$7.75

CURLY EXTENSION LEAD 6.5MM STEREO PLUG TO SOCKET - 6M



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	6.0m	WA-7046	\$9.95	\$8.75	\$7.75

NOISE CANCELLING HEADPHONES

ACTIVE NOISE CANCELLING HEADPHONES WITH BUILT-IN USB RECHARGEABLE BATTERIES

Suitable for frequent flyers and travellers, these active noise cancellation headphones will reduce your background noise by up to 16dB, allowing you to relax and enjoy high quality digital stereo sound from your in-flight entertainment or personal media player. They reduce cabin noise or your exposure to low-frequency sounds helping you to manage your fatigue while travelling. The ear cups rotate for compact size and easy storage inside your hand-carry bag or seat pocket. Supplied with built-in rechargeable batteries, which is charged through the USB cable provided.

- High quality digital stereo sound
- Active noise cancellation receiver
- Reduces noise by 16dB
- Built-in rechargeable battery
- Airplane adaptor / 3.5mm to 6.5mm adaptor
- USB charge cable / 3.5mm stereo audio cable

Specifications	AA-2088
Frequency response	15Hz - 25kHz
Distortion	0.1%
Sensitivity	96dB
Impedance	32ohm
Driver size	40mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2088	\$79.95	\$71.95	\$63.95

NOISE CANCELLING HEADPHONES WITH BLUETOOTH® TECHNOLOGY

Affordable wireless headphones with Bluetooth® streaming and active noise cancelling function, perfect for those long noisy bus, train or plane trips. The headphones are light, compact, stylish and comfortable, and will match the features and performance of brand name equivalents available in the market at 4 times its price. They feature a built-in rechargeable battery that will provide continuous play back of up to 30 hours, ANC (Active noise cancelling) feature that can be turned on or off via a switch, and a 3.5mm auxiliary input for wired connection. Supplied with 3.5mm stereo audio cable, 6.5mm adaptor, USB charging cable, a double 3.5mm mono airplane adaptor, and case to store the headphones that fold down to minimise space when not in use.

Specifications	AA-2130
Bluetooth® version	4.1
Bluetooth® operating range	up to 10m
Noise cancelling rate	85%
Audio impedance	32 ohms
Charging time	3.0 hours
Battery life	
Only noise cancelling on	30 hours
Only Bluetooth® on	15 hours
Bluetooth®+noise cancelling on	12 hours
Connection	3.5mm jack
Speakers	40mm Mylar



	Cat.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	AA-2130	\$139.00	\$124.95	\$110.95

WIRELESS HEADPHONES

INFRARED WIRELESS STEREO HEADPHONES

A great pair of good-looking dual-channel wireless headphones with a digital TOSLINK audio input to connect your digital devices. Setup is quick and easy and the sound clarity is excellent. The ultra-light design allows them to sit so comfortably on your head you'll hardly believe there is anything there. It also folds up for easy storage and transportation. With a range of about 15m and the ability to use one transmitter for multiple headphones, this unit is perfect for a variety of audio experiences. Wirelessly connects with any TV, VCR, VCD, DVD, Computer, MP3 player, audio system or even in your car and caravan. Additional headphones available separately (see AA-2039).

- Operation distance: up to 15m with latest infrared wireless technology
- Active noise reduction system for crystal clear sound
- Volume control and channel selection on headphones
- Several headphones can be used simultaneously with one transmitter
- RCA cable (included)

Specifications	Both
Carrier frequency (Infrared)	A channel: 2.3MHz, 2.8MHz, B channel: 3.2MHz, 3.8MHz
Signal-to-noise ratio	>55dB
Frequency response	30Hz to 20kHz
Weight	30g
Headphones require	2 x AAA batteries
Base	138(W) x 100(H) x 30(D)mm
Headphones	180(W) x 190(H) x 42(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
IR Wireless Headphones with TOSLINK	AA-2038	\$79.95	\$71.95	\$63.95
Spare Headphones to suit	AA-2039	\$34.95	\$31.45	\$27.90

WIRELESS HEADPHONES WITH BLUETOOTH® TECHNOLOGY

NEW 2015

These fantastic looking slim-profile headphones boasts superb sound quality with a crisp highs and deep bass. There's no need for wires - they are rechargeable and simply connect to your Smartphone, MP3 player or PC using Bluetooth® technology. It also has an auxiliary input, or insert a microSD card (not supplied) up to 32GB to play MP3 files directly. To top it off there's a built in microphone so you can take phone calls if you are connected to your Smartphone with user control buttons built into the outside of the earmuff.

A matte paint finish with moulded memory foam earmuffs, it will provide maximum comfort and stylish appearance to match. Foldable design for ultimate portability, it provide 20 hours of continuous play time, perfect for a full day of use.

- Bluetooth® Version: Bluetooth® 4.0
- 40mm dia. 32ohm drivers
- Speaker Frequency Response: 20Hz- 20kHz
- Up to 20 hours play time
- Bluetooth® Technology,



	Cat.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	AA-2122	\$64.95	\$58.50	\$51.95

RECHARGEABLE HEADPHONES WITH NFC® & BLUETOOTH® TECHNOLOGY

NEW 2015

Give your ears a treat with amazing clarity and deep bass performance through these high performance portable stereo headphones. Completely wireless and connects to your sound source via Bluetooth® Technology or NFC®. There is also a built-in microphone with echo-cancellation if you want to take calls hands-free. Alternatively, you can use them by simply connecting to any music device by using a 3.5mm to 3.5mm audio cable, or inserting a microSD card (not supplied) up to 32GB to play music files directly.

Buttons on the ear pads allows you to turn on/off, play/pause music, to make, receive and reject phone calls, and redial the last number. Voice control and song selection can also be done with the same buttons. Fashionable design with comfortable over-ear leather pads to ensure that you look good while listening to your favourite tunes.

- Bluetooth® Technology version 4.0 and NFC®
- 40mm Dia. 32ohm drivers
- Frequency response: 20Hz-20kHz
- Playback Time: Up to 25 hours
- High quality for Line-in music
- Multi-function Options: Bluetooth®, AUX, microSD Card (up to 32GB)



	Cat.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	AA-2124	\$79.95	\$71.95	\$63.95

DIGITAL WIRELESS STEREO HEADPHONES WITH TOSLINK

Stylish wireless headphones with a digital TOSLINK audio input to connect your digital devices such as home theatre system, gaming consoles, CD and DVD players. Audio clarity and sound reproduction is superb. It has a built-in rechargeable battery to allow you freedom to move around. The headphone docks to the transmitter snugly and charges when not in use. Supplied with a mains power adaptor, 3.5mm stereo audio and RCA leads.

- TOSLINK and 3.5mm stereo inputs
- Built-in FM radio
- Low battery alarm

900MHZ - AA-2083
2.4GHZ - AA-2086

Specifications	Both
Frequency response	22 - 20kHz
Signal-to-noise ratio	50dB
R/L channel separation	30dB
Carrier frequency	900MHz (AA-2083) 2.4-2.48GHz (AA-2086) (WLAN hopping)
Modulation	Digital
Maximum transmission power	9.9dBm
Radio tuning band	FM 87.5MHz to 108MHz
Transmission range	100m (AA-2083) 70m (AA-2086)
Transmitter power	5VDC or 3 x 1.5V AAA batteries
Headphone power	Internal rechargeable 900mAh Li-Po Battery
Transmitter only	180(W) x 100(H) x 74(D)mm
Transmitter with headphones	180(W) x 220(H) x 74(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
900MHz	AA-2083	\$89.95	\$80.95	\$71.95
2.4GHz DIGITAL	AA-2086	\$109.00	\$89.95	\$79.95

WIRELESS HEADPHONES (CONTINUED)

RECHARGEABLE WI-FI WIRELESS HEADPHONES

This rechargeable Wi-Fi headphones connect to your Smartphone or Tablet across your Wi-Fi network. The range on these headphones goes as far as your Wi-Fi network coverage, and multiple headphones can be connected at the same time. Using the freely available iOS® or Android® App you can play the same or different audio files to multiple Wi-Fi headphones. A terrific choice for listening to music throughout the house. The physical features are simple and uncomplicated. There is a volume control on the earpieces along with the Pause/Play button. There is a micro USB port on the headphone which allows you to charge the device via the USB cable.



NEW
2015

- High quality digital stereo sound
- Built-in rechargeable battery
- Easy to operate free App available for both iOS® and Android® platforms
- USB charging cable included
- Charge time: 8 hours
- Working time: 4 hours
- Dimension: 195(W) x 157(H) x 90(D)mm



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Wi-Fi	AA-2132	\$149.00	\$133.95	\$118.95

BLUETOOTH® DONGLE/RECEIVERS

BATTERY OPERATED AUDIO RECEIVER WITH BLUETOOTH TECHNOLOGY

This portable and simple to use receiver allows to you to play music from your iPad®, iPhone®, mobile phone, Tablet PC or any Bluetooth® device through your headphones or home audio system without the need for messy wiring. It is powered by AAA batteries (not included), has an on/off switch and an LED indicator for the pair status.



NEW
2015



Specifications	AA-2089
Bluetooth® version	2.1v + EDR
Requires	3 x AAA batteries
Average use time	20 hours
Dimensions	71(L) x 46(B) x 21(H)mm



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	AA-2089	\$19.95	\$17.95	\$15.70

NFC® BLUETOOTH® AUDIO RECEIVER WITH MUSIC CONTROL

A clever and convenient way to listen to your music or take calls on the go without having to be tethered to your phone or Tablet. It uses Bluetooth 4.0 and Apt-x coding technology for high quality stereo audio transmission, and NFC® (Near Field Communication) that makes it easy and fast to pair with your phone with one touch. It features a rechargeable battery, belt/pocket clip and 3.5mm stereo socket to connect your own earphones, or to the car radio (even the home Hi-Fi) using the supplied 3.5mm audio cable. The micro USB port allows you to charge the device (cable included) or to stream music to your computer.

- Multifunctional buttons for track and volume control, or to answer and end calls.
- Can show battery meter on the iPhone® or iPad® status bar
- NFC® & Apt-x support

Specifications	AA-2087
Bluetooth® version	4.0
Charge time	2-3 hours
Standby time	Up to 200 hours
Use time	8 hours (average)
Transmission range	10m
Dimensions	34(L) x 34(W) x 12.5(D)mm
Weight	12g



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bluetooth® + NFC	AA-2087	\$44.95	\$40.45	\$35.90

RAINCHECK!

If your local Jaycar store has sold out of a currently advertised line we will be happy to issue you with a 'raincheck'.
Conditions apply - see page 528 for details.

BLUETOOTH® AUDIO DONGLE WITH TRANSMIT/RECEIVER

Enables your audio device to transmit or receive wireless stereo audio. If your mobile phone or MP3 player lacks Bluetooth® wireless technology, just plug your device into this transmitter/receiver with a standard 3.5mm audio lead and you'll have wireless audio capability. Alternatively, if your speaker or headphone lacks Bluetooth® functionality but your phone or MP3 player does this will also allow you to turn the speaker into a wireless Bluetooth® speaker.

Specifications	AA-2085
Charging time	2.5 hours
Wireless range	10m
Operating time	Transmitter: 10hrs Receiver: 9hrs
Dimensions	45(L) x 33(W) x 7(H)mm



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	AA-2085	\$59.95	\$53.95	\$47.90

AUDIO RECEIVER WITH NFC & BLUETOOTH TECHNOLOGY

Stream music from your Bluetooth® or NFC® enabled Smartphone or Tablet directly to your stereo system or stand-alone speakers wirelessly. It is easy to setup and allows you to control the music from up to 10m away. Power can be supplied using the included 5V power supply or from a USB port on a stereo using 1.9m USB lead. A 1.8m male to male 3.5mm audio lead and a 3.5mm female to 2 x RCA lead are included to connect the receiver to the audio input of your speaker system.



- Bluetooth® 4.0v with SBC® support for high quality stereo audio
- Up to 10m transmission distance
- Can work with non-NFC® equipped devices
- A2DP Bluetooth® profile supported
- Audio stereo output
- Stores up to 8 device ID's

Specifications	AA-2108
Bluetooth® version:	4.0
Power	5V (power supply included)
Dimensions	58(L) x 58(D) x 15(H)mm



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bluetooth® + NFC	AA-2108	\$49.95	\$44.90	\$39.90

WI-FI AUDIO RECEIVER WITH TOSLINK & STEREO OUTPUT

Convert your home stereo system into a Wi-Fi audio system. This receiver connects your stereo system and your existing Wi-Fi home network and allows you to access any device connected to your home's Wi-Fi network and to stream audio. It features a digital (TOSLINK) and analogue (3.5mm stereo) output.

With its WPS feature, you can have an extended range of your Wi-Fi network. iOS® devices can use the existing AirPlay feature to stream to this receiver box with App required. For Android® devices you have to purchase and install an App. that supports DLNA Protocol. Windows® devices require Apps that you can download from Google® Play or similar sites.

* App/Software information listed in user manual

- Package includes:
- Wireless music receiver
 - Mains power adaptor
 - USB cable
 - RCA audio cable
 - Quick start guide



- Streaming local or online music from iOS®, Android® Device to speaker
- Support DLNA, AirPlay, Qplay
- Aluminium Case
- Output: TOSLINK or 3.5mm stereo

Specifications	AA-2110
Wi-Fi	IEEE 802.11 b/g/n Standard
Wi-Fi Encryption	WPA, WPA2, WPA2 Mixed
Audio sample rates	up to 96kbps
Audio SNR	96dB
Audio Format	AAC, MP3, WAV
Streaming Protocol	DLNA, Airplay, Qplay
Audio Out	S/PDIF or Stereo
Dimensions	80(L) x 80(W) x 20(H)mm



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Wi-Fi	AA-2110	\$79.95	\$71.95	\$63.95

EARPHONES

WIRELESS EARPHONES

RECHARGEABLE IN-EAR STEREO BLUETOOTH® HEADSET

Durable, lightweight Bluetooth® headset suitable for casual or sports use. Ingeniously designed, the cable wraps around behind your neck staying clear of your arms and torso as you do your favourite exercises, helping to prevent accidental damage or physical injury. The in-ear design offers a snug fit and helps to isolate noise. aptX® coding technology delivers high quality audio indistinguishable from wired connections, while a built-in mic allows you take phone calls on the move. AAC support ensures compatibility with iOS® devices. Perfect for use in the gym or on your run outdoors.

- Frequency response: 10Hz - 20kHz
- Supports Bluetooth® 4.0
- Range: 10m
- Supported profiles: HSP, HFP, A2DP & AVRCP
- Small, medium and large in-ear tips supplied
- Charging via a USB port using a special clip
- Operates up to 4hrs
- Standby time of up to 150hrs
- Dimensions: 54(L)mm (wraparound lead)



NEW
LOW
PRICE

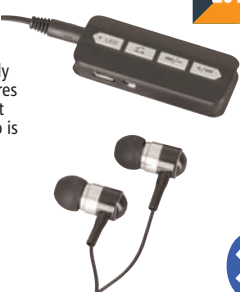


↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	AA-2069	\$59.95	\$53.95	\$47.90

RECHARGEABLE BLUETOOTH® AUDIO RECEIVER WITH EARPHONES

This rechargeable audio receiver with earphones uses Bluetooth® technology to connect to your Smartphone or Tablet wirelessly. Its in-ear design can easily isolate outside noise, and you can freely control the switches and selection options. Features a unique clip-on design that allows you to wear it the anywhere you want. Perfect for a person who is always on the move, gym, jogging, etc. Supplied with a USB charging cable.

- Stereo
- Fashionable clip-on design
- Hands-free function



NEW
2015



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	AA-2093	\$39.95	\$35.90	\$31.90

WIRELESS EARPHONES

TV HEARING AID

A lightweight TV hearing aid with comfortable ear inserts. It uses noise cancelling technology to reduce background noise and features voice clarification technology so you don't miss any of dialogue in your favourite TV show, news broadcast or movie. A tone control button allows adjustment for different frequency hearing abilities and can be connected either directly to the TV or a digital set-top box. When not in use the cradle charges the batteries.

- Tone control
- Balance control
- Auto power off function for transmitter
- Several users can listen from one transmitter
- Battery life: 12 hours
- Headphone dimensions: 195(H) x 138(W)mm
- Receiver dimensions: 120(W) x 97(L) x 18(H)mm



NEW
LOW
PRICE



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2079	\$99.95	\$89.95	\$79.95

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INFRARED T-COIL HEARING AID TRANSMITTER & RECEIVER

An ingeniously designed infrared TV hearing aid system that utilises tele-coil (t-coil) technology for use with most common hearing aids. Unlike other big and clunky TV hearing aid designs, this system has a comfortable and lightweight neck loop that picks up the audio signal from the infrared transmitter. The signal is then retransmitted electromagnetically to the hearing aid device producing crystal clear audio sound. The infrared docking station has facility for two T-coil receiver neck loops. Simply dock the receiver and it will automatically charge the internal lithium battery which provides 8 hours of continuous use on a full charge. Features voice clarifying and noise cancelling technology, it also has automatic signal, balance and tone controls.



NEW
2015

- Phone hearing aid function
- Chatting hearing aid function
- Wired listening hearing aid function for MP3, radio, PC etc
- Tone control
- Balance control
- Auto power off function for transmitter
- Battery life 8 hours

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2099	\$139.00	\$124.95	\$110.95

EARPHONES

MAGNETIC EARPIECE

Magnetic 8 Ohm earpiece with 3.5mm plug connected. Suitable for radios, portable TVs, etc.



- Lightweight and easy to use

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3300	\$2.95	\$2.60	\$2.40

CRYSTAL EARPIECE

Crystal earpiece of high impedance with 3.5mm plug. Suitable for crystal sets or for experimental use.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3305	\$5.95	\$5.25	\$4.75

STEREO INNER EAR EARPHONES

Low cost inner ear phones that offer superb performance. Great replacement for your tired or damaged MP3 or iPod® players.

Specifications	
Speaker Diameter	10mm
Frequency range	20Hz - 20kHz
Impedance	32 Ohms +/- 5%
Sensitivity	105dB +/- 5dB
Max power input	10mW



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2090	\$5.95	\$5.25	\$4.75

METAL STEREO INNER EAR EARPHONES

These inner ear earphones reproduce good quality sound and are extremely durable owing to their metal construction (excluding the cable).

Specifications	
Speaker Diameter	10mm
Frequency range	20Hz - 20kHz
Impedance	32 Ohms +/- 5%
Sensitivity	105dB +/- 5dB
Max power input	10mW

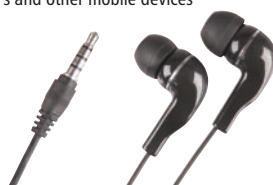


↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2092	\$9.95	\$8.75	\$7.75

STEREO INNER EARPHONES WITH BUILT-IN MIC

Quality stereo inner ear earphones with a built-in microphone. Enjoy hassle free music enjoyment without the inconvenience of having to remove your earphones when answering a call. Suitable for use with iPhone®s and other mobile devices where headphone mic is supported.

Specifications	
Speaker Diameter	10mm
Frequency range	20Hz - 20kHz
Impedance	32 Ohms +/- 5%
Sensitivity	105dB +/- 5dB
Max power input	10mW
Mic	-58dB ± 3dB



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2096	\$9.95	\$8.75	\$7.75

EARPHONES (CONTINUED)

KIDS EARPHONES WITH VOLUME LIMITER

These earphones have been especially designed to help prevent damage to hearing that may be caused by listening through earphones at unsafe levels. Ideal for young children or teenagers.

- Built in volume limiter
- Maximum output level: 85dB
- Cable length: 1.2m
- Jack: 3.5mm

NEW LOW PRICE



↑	Cat.	Qty 1+
	AS-2084	\$4.95

SECURE CLIP ON EARPHONES

These little beauties will stay put even when you are running or working out at the gym.

- 20 - 20kHz frequency response
- 96dB sensitivity
- 32 Ohms impedance
- 3.5mm stereo plug



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2023	\$14.95	\$13.35	\$11.70

STEREO EARPHONES WITH MICROPHONE & BERYLLIUM COATED DRIVERS

A set of high quality earphones that features pure Be4 Beryllium coated diaphragms, which reproduce high fidelity sound with a great dynamic range, deep punchy bass, clear vocals and crisp treble. There is also a microphone so you can take calls on-the-go when connected to your Smartphone. The interchangeable silicone ear-tips provide a convenient, comfortable fit. They also feature detachable ear hooks and classy aluminium metal housing to ensure quality and comfort. Comes with a dustproof zippered case, and 3 pairs of single flange ear-tips. Ideal for the audiophile who's on the go, but also suitable for voice chat, conference calls and gaming.

NEW 2015



Specifications	AA-2091
Frequency response	10Hz to 24kHz
Impedance	16 ohms
Sensitivity	95dB +/-3dB
Max. input sound level	106dB SPL
Driver size	10mm
Max. input power	10mW
Connector type	3.5mm 4-pole stereo/iPhone® compatible plug
Lead length	1.2m
Case Dimensions	80(Dia.) x 23(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2091	\$34.95	\$31.45	\$27.90

HIGH PERFORMANCE STEREO INNER EARPHONES

Tested Best. These stylish earphones has comparable performance to brand name models available in the market retailing up to hundreds of dollars. Ergonomically designed, it sits comfortably in your ears producing crystal clear highs and powerful bass notes. Comes with strong flat cables that will not easily break and is terminated with a gold plated 3.5mm stereo plug.

Specifications	AA-2095
Sensitivity	105dB
Frequency range	20Hz-20kHz



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2095	\$34.95	\$31.45	\$27.90

EARPHONES ACCESSORIES & SPARES

EARPHONE REPLACEMENT PADS

Earphone Foam Replacement Pads, 6 black sponge pads, for replacing soiled ones on earphones.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2013	\$2.95	\$2.60	\$2.30

AMPLIFIERS - STEREO

2 X 18WRMS STEREO AMPLIFIER

LOW COST MAINS POWERED

This is a simple, fairly bullet-proof 18W/channel transistor amp and it's surprisingly loud! It is ideal as a small office or workshop PA amp in churches, community halls etc. It is protected from accidental speaker wiring shorts and if abused will simply shut down and reset after it has cooled off. It has a front panel microphone input, bass & treble controls as well as a master volume control.

- A suitable microphone for this unit is AM-4190.

Specifications	AA-0472
Power	240VAC 50Hz 150mA
Output	2 x 18WRMS/4Ω
Response	50-18kHz +3dB
Total Harmonic Distortion	0.08% @ 1W
S/N	60dB
Operating Temperature	0-50°C
Microphone Input	60mV @ 1k
Dimensions	170 x 77 x 157mm



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0472	\$39.95	\$35.90	\$31.90

2 X 15WRMS PORTABLE STEREO AMPLIFIER

This compact amplifier can run off 8 x AA batteries making it ideal for street performers, or by the AC adaptor included for a hi-fi setup at home or in the office. It outputs a clean 15 watts RMS per channel using a digital signal processor, and features spring-loaded push terminals for quick speaker wire termination and rear mounted 3.5mm stereo audio input. Includes a 1.8m 3.5mm male to 2 x RCA cable and 3.5mm plug to 2 x RCA socket adaptor for making connection to a PC, iPod®, MP3 player or portable CD player. Intelligent short-circuit and over-temperature protection ensure amplifier longevity. A great little amplifier for some serious use!



- Batteries not included

Specifications	AA-0487
Power Output	2 x 15WRMS
Minimum Speaker Impedance	4 ohm
Frequency Response	60Hz - 20kHz
Total Harmonic Distortion	<0.04%
Signal to Noise Ratio	>80dB
Dynamic Range	102 dB
Efficiency	88% (10W, 8 ohm)
Channel Separation	>45dB
Inputs	3.5mm Stereo
Dimensions	150(W) x 130(D) x 30(H)mm

Battery Powered

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AA-0487	\$59.95	\$53.95	\$47.90

2 X 15WRMS STEREO 2.4GHZ DIGITAL WIRELESS AUDIO AMPLIFIER SYSTEM

Send crystal clear audio from your Hi-Fi or portable music device to speakers further away or outside, without messy wiring. Built upon the popular Class T amplifier design this system exhibits high-fidelity, tube-like audio that audiophiles have come to love and enjoy. Connect your speakers to the spring terminals and power using the included power supplies or by 8 x AA batteries in each unit (available separately). Supplied with 2 x 150mm 3.5mm curly cables to connect your audio source.



- 3.5mm local input for Smartphone or MP3 player connectivity
- Transmitter & Receiver requires 8 x AA batteries each

Specifications	AR-1895
Power output	2 x 15WRMS (4Ω)
Dynamic range	90dB
Sample rate	44.1kHz, 16-bit
Range	up to 20 metres line-of-sight
Frequency response	20Hz - 20kHz
Dimensions	156(L) x 45(H) x 95(W)mm

Rear Panel

2.4GHZ DIGITAL

NEW LOW PRICE

1 YEAR WARRANTY

↑	Cat.	Qty 1+
	AR-1895	\$49.95

AUDIO AMPLIFIERS

AMPLIFIERS - STEREO (CONTINUED)

2 X 25WRMS COMPACT STEREO AMPLIFIER

A compact amplifier that can deliver up to 25WRMS of power per channel. It is ideal for home, office or a small workshop. Connect audio to the stereo RCA or 3.5mm line input, connect your speakers to the push down spring terminals, connect power and you're in business. There is also a 6.5mm microphone input on the front, making it ideal for a small office or workshop PA system.

- Controls include mic volume, music volume, bass and treble
- 18VAC 2.2A power supply included

Specifications	AA-0486
Power output	2 x 25WRMS
Output impedance	4 to 8ohms
Freq response	5Hz to 65kHz, +/- 3dB
S/N Ratio	72dB
Dimensions	216(W) x 65(H) x 150(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
2 x 25WRMS	AA-0486	\$119.00	\$106.95	\$94.95

2 X 50WRMS COMPACT STEREO PA AMPLIFIER

Uses digital sound processing to deliver the quality of a Class AB amplifier with the efficiency of a Class D. Features solid aluminium body, high current rated banana socket speaker terminals, stereo RCA audio input, front panel mounted 3.5mm stereo input and a 6.5mm headphone socket means it also doubles as a headphone amplifier. Rounded off with short circuit, thermal and overload protection. Package includes amplifier, 24VDC power supply, two sets of banana plugs, 3.5 to 6.5mm headphone adaptor, 3.5mm to 2 x RCA cable and coiled 3.5mm audio input cable.

Specifications	AA-0488
Power Output	2 x 50WRMS
Minimum Speaker Impedance	6 ohm
Frequency Response	20Hz - 20kHz
Total Harmonic Distortion	<0.01 % @30W, <5.0% @ 50W
Input Impedance	2k ohm +/- 5%
Signal to Noise Ratio	103dB (A weighted)
Dynamic Range	>100dB
Efficiency	85%
Channel Separation	95dB
Inputs	RCA / 3.5mm stereo
Weight	450g
Dimensions	78(W) x 150(D) x 50(H)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
2 x 50WRMS	AA-0488	\$169.00	\$151.95	\$134.95

AMPLIFIERS - STEREO, HI-FI COMPONENT

2 X 100WRMS STEREO AMPLIFIER WITH REMOTE CONTROL

This is a good looking, no-nonsense stereo amplifier that will form the heart of an impressive stereo system. The amplifier is rated at a generous 100WRMS per channel and has a flat frequency response from 50Hz to 20kHz. Bass and treble controls are fitted providing +/- 10dB cut or boost. Equipped with microphone input level control, an infrared remote control and screw down speaker terminals to firmly secure the speaker cables.

Specifications	AA-0470
Power Output	2 x 100WRMS (4Ω)
Frequency response	20Hz to 20kHz
S/N ratio (A - Weighted)	70db
THD	< 0.05%
Output impedance	4, 6 or 8Ω
Inputs for Tape	Tape Tuner, AV1, AV2, CD, Phono
Input impedance	47kΩ
Input sensitivity	Phono - 2.5mV
	Tape, Tuner, AV 250mV
Tape Out level	250mV
Size	420(W) x 135(H) x 214(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
2 x 100WRMS	AA-0470	\$219.00	\$196.95	\$174.95

COMPONENT AMPLIFIERS

FANTASTICALLY COMPACT 65W RMS X 2 CLASS D AMPLIFIER

This is an unbelievable product! Never before will you have seen such a powerful 2-channel (STEREO) amp in such a compact size! The amp itself measures a tiny 170(L) x 95(W) x 28(D)mm!! It has frugal controls: 1 x volume knob and an On/Off switch. On the back are the line-level RCA inputs and insulated speaker terminals, along with a DC plug for power. Supplied with AC Power lead, stereo 3.5mm plug to plug and stereo 3.5mm plug to RCA plugs.

You must come in to one of our stores just to marvel at this thing!

Power supply (supplied, but separate):

- 36VDC @ 4.2A
- 240V AC, 2.2A

Specification	AA-0505
Distortion	Negligible
Freq resp	15Hz to 22kHz ±1dB
S/N	90dB (25kHz band limited)
Switching freq	1.45MHz
Sensitivity	430mVRMS
Power	2 x 65W (both channel driven)
Dimensions	170(L) x 95(W) x 28(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
2 x 65WRMS	AA-0505	\$219.00	\$196.95	\$174.95

200W & 400W RACK MOUNT AMPLIFIERS

Very versatile rack mount amps that suit a variety of applications. Add a small mixer and use them as a PA amp, or standalone as a foldback amp. They have unbalanced 1/4" jack inputs and balanced XLR inputs. Speaker connections are by Speakon connectors or screw binding posts. Very versatile amps that can be run as dual channel, stereo or bridged. The build quality of these amps is excellent, with very solid aluminium chassis and front panels so they are a very cost-effective solution for a pro audio application.

- Single channel or bridged
- Fan cooled
- Separate level controls for each channel
- Clipping and overload protection indicator LEDs
- 2U rack mount / 3U subwoofer amplifier

FOR RACK ENCLOSURES SEE PAGE 128

Dual Channel Bridged 200W Rack Mount Amplifier AA-0477
Dual Channel Bridged 400W Rack Mount Amplifier AA-0479



Specifications	AA-0477	AA-0479
Power output	2 x 100WRMS @ 4 ohms 1 x 200WRMS bridged @ 8 ohms	2 x 200WRMS @ 4 ohms 1 x 400WRMS bridged @ 8 ohms
THD	<0.3% @ 1kHz 1W	<0.3% @ 1kHz 1W
S/N ratio	85dB	85dB
Input sensitivity	775mV	775mV
Short circuit protection voltage	3V	3V
Dimensions	480(W) x 360(D) x 90(H)mm	480(W) x 360(D) x 90(H)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
200WRMS Amplifier Bridged	AA-0477	\$269.00	\$245.00	\$219.00
400WRMS Amplifier Bridged	AA-0479	\$379.00	\$345.00	\$305.00

MONTHLY SPECIALS

Look out for our monthly promotions in store now!

HOME ENTERTAINMENT SPEAKERS

CENTRE SPEAKER WITH BRACKET

Update or replace the centre speaker in your surround sound system with this great sounding speaker. It features 2 x 2.5" full range speakers rated at 15WRMS, housed inside a rectangular shaped speaker box to suit most existing systems.

- Supplied with an adjustable swivel mount bracket for wall installations.

Specifications	CS-2463
Speaker	2.5" x 2
Sensitivity	88dB
Power	15WRMS
Frequency range	60-20kHz
Impedance	8ohm
Dimension	170(H) x 110(W) x 89(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 10+
15WRMS	CS-2463	\$39.95	\$35.90	\$31.90



2.5" INDOOR LIFESTYLE CUBE SPEAKERS

These cube speakers will blend with virtually any indoor setting and perfectly suit a home entertainment system or small PA setup. Surprising sound reproduction from the full range 2.5" speakers. Supplied with swivel brackets and mounting hardware suitable for wall or ceiling mount.

- Sold as a pair
- Power handling: 15WRMS
- Impedance: 8ohm
- Sensitivity: 88dB
- Frequency response: 150Hz - 20kHz
- Dimensions: 90(H) x 88(W) x 100(D)mm

Save a fortune over expensive Euro types



↑	Cat.	Qty 1+	Qty 2+	Qty 10+
15WRMS Pair	CS-2431	\$39.95	\$35.90	\$31.90



2.1 SPEAKER SUBWOOFER PACKAGE

Combine our 8" Subwoofer (CS-2433) and a pair of CS-2431 2.5" Cube Speakers



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	CS-2434	\$169.00	\$151.95	\$134.95



8" ACTIVE SUBWOOFER WITH SATELLITE OUTPUT

Add some much needed bass and subsonic "feel" to your home theatre system or gaming machine with this active subwoofer. Movie audio will be enhanced, in-game gun battles will be more vibrant and immersive. Incorporates 2 x 15WRMS audio output for satellite speaker connection for true 2.1 stereo performance.

- Housed in a sleek black enclosure.

Specifications	
Amplifier Power Output	120W
Frequency Response	30Hz-250Hz
Driver	8"
Variable Crossover	50Hz-200Hz
Dimensions	350(L) x 260(W) x 315(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
120W	CS-2433	\$189.00	\$169.95	\$150.95



MINI COMMS SPEAKERS

RECTANGULAR COMMUNICATIONS SPEAKER

For use with CB's and other communication devices, this mono speaker can be mounted in any position for enhanced listening of incoming transmissions. It comes with a 3.5mm plug on a 2 metre cable and includes screws and bracket for mounting. It incorporates an 8 ohms rectangular speaker and can handle 5 watts max.

Specifications	AS-3182
Frequency response	100Hz- 15kHz
Dimensions	130(W) x 80(H) x 59(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Each	AS-3182	\$15.95	\$14.35	\$12.70



MINI COMMUNICATIONS SPEAKER

For use with CB's and other communication devices, this mono speaker is small and can be mounted in any position for ease of use. It comes with a 3.5mm plug on a 2 metre cable and includes screws and bracket for mounting. It incorporates an 8 ohms round speaker and can handle 5 Watts Max.

Specifications	AS-3185
Frequency response	100Hz- 15kHz
Dimensions	85(W) x 65(H) x 55(D)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Each	AS-3185	\$19.95	\$17.70	\$15.70



NAVAL STYLE COMMUNICATIONS SPEAKER WITH GYMBAL MOUNT

This small but powerful unit delivers clear voice from either VHF, 27MHz or even HF communications receivers. It features a no-nonsense naval style in a light grey. It is very close to waterproof, in that the speaker cone is Mylar, the bezel is gasketed and the cord entry is IP65.

Specifications	AS-3186
Power handling	2.25WRMS
Power Max	5W
Impedance	80hm
Freq range	320Hz - 4,500kHz
Sensitivity	88dB/m
Dimensions	66(L) x 66(W) x 55(H)mm
Weight	185g
2.2m cable terminated to a 3.5 plug	
Bezel dimensions	65mm square, 55 deep

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
2.25WRMS Each	AS-3186	\$24.95	\$22.35	\$19.70



4" COMMUNICATION SPEAKER

A powerful waterproof speaker to connect to CB radios and other communication devices for clearer audio reproduction. Features a 4" (102mm) Mylar speaker, right angle 3.5mm plug on a 1.2 metre cable and includes a mounting bracket.

Specifications	AS-3187
Power handling	10WRMS
Power Max	15W
Impedance	80hm
Freq range	300Hz - 10kHz
Sensitivity	88dB/m
Dimensions	108(L) x 108(W) x 65(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
10WRMS	AS-3187	\$29.95	\$26.90	\$23.70



FOR OUR FULL RANGE OF SMARTPHONE & MP3 PLAYER SPEAKERS SEE PAGES 482 TO 483

12V SIREN WITH 10 SOUNDS & MICROPHONE

Perfect for sports carnivals, school fairs, kids parties, or to add a bit of flair to your car horn. This siren is 12VDC powered and features 5 animal sounds (cow, dog, horse, cat, rooster) and 5 different siren tones. It also comes with a microphone so doubles as a powerful PA system. Wire up to your car battery (or to a 12VDC power supply) and away you go. Includes speaker, control unit, and microphone.

- Controller dimensions: 135(L) x 117(W) x 38(H)mm
- Speaker dimensions: 115(L) x 97(Dia.)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
12VDC	LA-5262	\$44.95	\$40.45	\$35.90



WALL SPEAKERS

SPEAKER SYSTEMS

ABS INDOOR/OUTDOOR SPEAKERS

Attractive in design, these 2 way speaker system are very versatile. Suitable for indoor and outdoor (covered areas) applications, they can be mounted to a wall or ceiling and can be rotated 180 degrees for perfect sound projection. Each has a polypropylene woofer and dome tweeter. Ideal for conference rooms, auditoriums, lecture halls or out on the patio. Sold as a pair.



4" INDOOR/OUTDOOR SPEAKERS

Cat. CS-2475

Specifications	CS-2475
Power handling	25WRMS
Frequency response	120Hz - 20kHz
Nominal Impedance	8 ohms
Cabinet size	210(H) x 140(W) x 120(D)mm



5" INDOOR/OUTDOOR SPEAKERS

Cat. CS-2476

Specifications	CS-2476
Power handling	30WRMS
Frequency response	100Hz - 20kHz
Nominal Impedance	8 ohms
Dimensions	245(H) x 185(W) x 168(D)mm



6.5" INDOOR/OUTDOOR SPEAKERS

Cat. CS-2477

Specifications	CS-2477
Power handling	40WRMS
Frequency response	80Hz - 20kHz
Nominal Impedance	8 ohms
Dimensions	296(H) x 217(W) x 190(D)mm



8" INDOOR/OUTDOOR SPEAKERS

Cat. CS-2478

Specifications	CS-2478
Power handling	50WRMS
Frequency response	50Hz - 20kHz
Nominal Impedance	8 ohms
Dimensions	345(H) x 285(W) x 220(D)mm



Sold as Pair	Cat.	Qty 1 +	Qty 2 +	Qty 10 +
4" Indoor / Outdoor Speakers	CS-2475	\$69.95	\$62.95	\$55.95
5" Indoor / Outdoor Speakers	CS-2476	\$79.95	\$71.95	\$63.95
6.5" Indoor / Outdoor Speakers	CS-2477	\$119.00	\$106.95	\$94.95
8" Indoor / Outdoor Speakers	CS-2478	\$189.00	\$169.95	\$150.95

2 WAY ACTIVE PA SPEAKERS WITH BLUETOOTH® TECHNOLOGY

These indoor and outdoor active stereo speakers are great sounding and versatile speakers. Both speakers are two way system, utilising powerful woofers and good quality silk dome tweeters. Simply mount on the wall or ceiling and audio can be transmitted directly to the speakers via Bluetooth technology. Simple and easy to use, it comes with a power supply with a weatherproof locking connectors. Great for use in classroom environments, gymnasium, halls, pubs and clubs. Available in 5.25" (CS-2470) or 6.5" (CS-2472) to suit your application.

Common features:

- Bluetooth® 3.0 source connectivity
- A2DP standard
- Compatible with A2DP standard

Specifications	CS-2470	CS-2472
Woofer Size	5.25"	6.5"
Tweeter	1/2" PEI Dome	1" Silk
Bluetooth® range	up to 10m	up to 10m
Output	30WRMS	50WRMS
Frequency response	80Hz - 20kHz	50Hz - 20kHz
Impedance	4 Ohms	8 Ohms
Dimensions	252(W) x 163(H) x 163(D)mm	302(H) x 196(W) x 194(D)mm

Sold as a Pair



NEW
2015



Sold as a Pair	Cat.	Qty 1 +	Qty 2 +	Qty 10 +
5.25" Indoor / Outdoor Speakers	CS-2470	\$199.00	\$178.95	\$158.95
6.5" Indoor / Outdoor Speakers	CS-2472	\$249.00	\$225.00	\$198.95

LET'S FIND EVERYTHING YOU NEED!

SPEAKER POLARITY TESTER WITH TONE GENERATOR

Ideal for troubleshooting and testing an audio system and installation. It offers an output range of 0-8 volts at a variable 13Hz to 10kHz tone for setting system levels, checking speaker crossover points, verifying connections and general trouble-shooting. It features a 9V speaker popper for visually testing speaker connection polarity. Connections can be made via included RCA or alligator clips. It also features an auto shutoff for extended battery life.

- Tone generator, speaker polarity and RCA cable tester
- Output Range: 0V-8V
- 9V speaker popper
- RCA or alligator clips
- Power: Requires 9V Battery
- Dimensions: 100(H) x 65(W) x 23(D)mm



NEW
2015



	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
	AA-0414	\$29.95	\$26.95	\$23.70

IN-CEILING & WALL MOUNT SPEAKERS

6.5" 2 WAY CEILING WI-FI SPEAKERS

These Wi-Fi 6.5" ceiling speakers connect to your Wi-Fi network and stream music from your Smartphone, Tablet or computer. The master speaker incorporates a 2 x 50WRMS amplifier, which powers both speakers. Each speaker has a high quality Kevlar woofer and titanium tweeter for smooth frequency response with crisp highs. The strength of Kevlar helps the cone retain its shape at very high energy levels and its low mass assures quick, accurate response.

A great solution when you are unable to run speaker wiring through the walls. The solution is also capable for multi-room applications so you can connect multiple speaker pairs on the same network and stream the same audio on all rooms, or individual audio tracks to each speaker pair.

- Built-in Wi-Fi function, can be controlled by Smartphone/Tablet/PC
- Built-in Hi-Fi level amplifier: 2 channel 2 x 50WRMS
- 2 standard home Hi-Fi level in-ceiling speakers
- Kevlar Woofer
- Built-in Wi-Fi
- Wireless network compatibility 802.11b/g/n
- Support online audio streaming media

Specifications	CS-2468
Support audio format	MP3/WMA/AAC/ACC/ACC+/ALAC/APE/WAV
Amplifier	
Type	Class D (digital)
RMS power	2 x 50W/8 Ohms
Power input	24VDC/5A
Speaker	
Frequency response	65Hz-20KHz
Power	60WRMS
Impedance	8 Ohms
Sensitivity (1w/1m)	90dB
Woofer	6.5" Kevlar woven cone
Tweeter	1.2" Titanium dome
Treble attenuation	+3dB/-3dB
Dimensions	230(L) x 230(W) x 100(H)mm



Rear Shot

NEW
2015



↑				Cat.	Qty 1+	Qty 4+	Qty 10+
	6.5" 2 Way	Pair	Wi-Fi	CS-2468	\$349.00	\$315.00	\$279.00

IN-CEILING 2 WAY 6.5" SPEAKER IN CAN HOUSING

A 2 way ceiling mount speaker which gives excellent audio quality due to an integrated housing on the back of the speaker. Being housed in a sealed metal can improves low frequency response as well as protecting the speaker from dust, debris, and insects. The housing also ensures speaker performance is not affected by variations in the ceiling space making it suitable for locations with false or raked ceilings. Featuring a lightweight 6.5" honeycomb woofer and coaxial silk dome tweeter it can be flush mounted easily using the fold out retaining clamps or suspended in mid air using chain or cable attached to the housing brackets. A screw terminal cable entry is located on the back of the housing and a white clip on cover neatly conceals the speaker & mounting screws.

Specifications	CS-2462
Woofer	6.5" honeycomb cone
Tweeter	25mm silk dome
Tweeter mount	Fixed
Rated Power	40WRMS
Impedance	8 Ohms
Frequency Range	110Hz - 18kHz
Sensitivity	89dB
Minimum mounting thickness	10mm
Dimensions	A 232, B N/A, C 210, D 190 mm



↑				Cat.	Qty 1+	Qty 4+	Qty 10+
	6.5" 2 Way	Each	Wired	CS-2462	\$79.95	\$71.95	\$63.95

LET'S FIND EVERYTHING YOU NEED!

SPEAKER ATTENUATORS

SPEAKER ATTENUATOR - 100W

A neat and functional solution for controlling the sound level in your multi-room audio speaker installation. The attenuator has 12 step level and fits in a single gang wallplate mount. It allows connection of up to 8 pairs of speakers to one stereo amplifier while maintaining correct impedance match between amp and speakers.



↑		Cat.	Qty 1+	Qty 4+	Qty 10+
		AC-1665	\$59.95	\$53.95	\$47.90

SPEAKER GRILLES

SPEAKER CEILING GRILLES



These grilles will suit our 4" speaker and our 8" 10 Watt speaker. White in colour.

↑		Cat.	Qty 1+	Qty 5+	Qty 10+
	4"	AX-3550	\$4.95	\$4.45	\$3.90
	8"	AX-3560	\$6.95	\$6.25	\$5.50

SPEAKER ATTENUATOR - 70W

Attenuates the audio signal by 46dB on an 8-Ohm system.

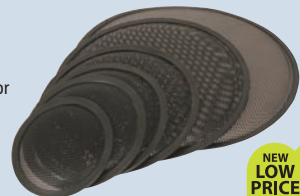
- Graduated in 12 steps
- Stereo
- Accepts 16 to 22 gauge wire / Screw terminal termination
- Includes wall plate
- Cut-out measures 33 x 67mm
- 62mm mounting depth from finished wall required
- Wiring diagram supplied



↑		Cat.	Qty 1+	Qty 5+	Qty 10+
		AC-1685	\$39.95	\$35.90	\$31.90

METAL SPEAKER PROTECTION GRILLES WITH CLIPS

Made from strong perforated steel, these quality grilles are designed to protect Hi-Fi or PA speakers in cabinets, cars, etc. Four sizes to choose from, each supplied with clips to firmly mount grilles to speaker boxes.



↑		Cat.	Qty 1+
	6" Speaker	Each	AX-3592 \$1.95
	6.5" Speaker	Each	AX-3593 \$1.95
	8" Speaker	Each	AX-3594 \$2.95
	15" Speaker	Each	AX-3598 \$3.95

WALL SPEAKERS & HI-FI COMPONENTS

IN-CEILING & WALL MOUNT SPEAKERS (CONTINUED)

IN-CEILING 2 WAY SPEAKERS

These ceiling speakers are a 2 way speaker design giving excellent audio quality compared to traditional PA speakers. Combining a coaxial woofer with dome tweeter they are available in three sizes to cover a variety of domestic and commercial applications. Two of the models also have adjustable tweeter mounts making them ideal when used in a home theatre setup by allowing you to direct high frequencies towards the centre of a room. The flush mount design and fold out retaining clamps allow them to be easily installed in new or existing ceilings, and the matte white finish blends in with most ceiling colours.

- Sold as a pair
- 8 ohm impedance

Specifications	CS-2451	CS-2453	CS-2455
Woofer	5.25" polymer cone	6.5" polymer cone	8" polymer cone
Tweeter	25mm silk dome	25mm silk dome	25mm silk dome
Tweeter mount	Fixed	Swivel	Swivel
Rated Power	30WRMS	40WRMS	50WRMS
Frequency Range	200Hz - 18kHz	180Hz - 18kHz	120Hz - 18kHz
Sensitivity	87dB	88dB	90dB
Minimum mounting thickness	6mm	8mm	10mm
Dimensions	A 200, B N/A, C 170, D 60 mm	A 230, B N/A, C 198, D 85mm	A 260, B N/A, C 228, D 85mm



⬆ Sold as a pair	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
5.25" 2 Way	CS-2451	\$59.95	\$53.95	\$47.90
6.5" 2 Way	CS-2453	\$79.95	\$71.95	\$63.95
8" 2 Way	CS-2455	\$99.95	\$89.95	\$79.95

DOMTWEETERS

One unit is magnetically screened for applications where the device may be near a CRT screen, Home Theatre for example. The Titanium dome unit has quite a high power rating for a dome tweeter.

Both are ferrofluid filled which keeps the voice coils cool and adds to reliability. We are delighted with these products.

25MM TITANIUM DOME TWEETER

This tweeter features a titanium dome with a phase shield which provides a more controlled high frequency roll-off. It produces very crisp & clear high frequencies.

Specifications:	CT-2007
Power handling	50WRMS
Nominal impedance	8 Ohms
Frequency response	2 - 20kHz
Sensitivity	91dB SPL @1W, 1m



RESPONSE

⬆ A	B	C	D(mm)	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
104	94	70	27	CT-2007	\$19.95	\$17.70	\$15.70

PIEZOTWEETER

RESPONSE RSN1005 PIEZOTWEETER

Does not require a crossover it's built in and is perfect for use for general PA applications where long throw is required.

Specifications:	CT-1930
Power handling	100WRMS
Nominal impedance	8 Ohms
Frequency response	1 - 20kHz
Sensitivity	93dB @1W, 0.5m



RESPONSE

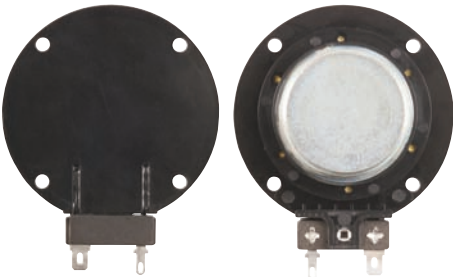
⬆ A	B	C	Dmm	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
85	101	75	70	CT-1930	\$10.95	\$9.75	\$8.75

EXCITER SPEAKER

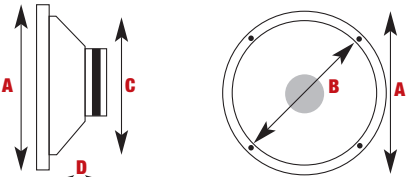
70MM FLAT PANEL "EXCITER" SPEAKER

Unlike a conventional speaker that creates audio waves by moving air as a result of the cone travelling in and out, this "exciter" speaker produces the audio waves by vibrating the flat panel it is fixed to. Install it on ceiling panels, under a table, on a wall partition, behind a fibreglass panel or other flat surface where a conventional speaker can't normally be used. They are low profile, and could be used in a sealed chamber in a marine application. Array them to increase sound level.

- Sold individually
- Power handling: 15WRMS
- Impedance: 8 ohms
- Voice Coil: 1.25" KSV
- Weight: 125g
- Dimensions: A: 70mm B: 62mm C: N/A D: 20mm



SPEAKER DIMENSIONS



- A = From one side to the other
- B = Mounting holes - diagonal
- C = Cut out in millimetres
- D = Depth



⬆	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
Each	AS-3039	\$18.95	\$16.95	\$14.95

RESPONSE PAPER CONE WOOFERS

These Response woofers are excellent for replacement or for new speaker design construction. Not only are they price competitive and perform very well, but they also look fantastic! The concave treated paper cone matched with rubber surround provides smooth overall

response. Housed in strong steel frame baskets, high power magnet and voice coils, these drivers will produce massive quantities of clean bass output for any musical application.

RESPONSE

4" SHIELDED PAPER CONE WOOFER/MIDRANGE

Specifications:		Re	6 Ohms
Power handling	27WRMS	Qms	1.73
Nominal impedance	8 Ohms	Qes	0.67
Frequency response	70Hz - 7kHz	Qts	0.48
Sensitivity	86dB SPL @1W, 1m	Vas	5 litres
Tuning frequency		Fs	59.9Hz



RESPONSE



↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	116	109	93	65	CW-2190	\$24.95	\$22.35	\$19.70

5" SHIELDED PAPER CONE WOOFER/MIDRANGE

Specifications:		Re	6 Ohms
Power handling	50WRMS	Qms	1.40
Nominal impedance	8 Ohms	Qes	0.72
Frequency response	70Hz - 7kHz	Qts	0.47
Sensitivity	88dB SPL @1W, 1m	Vas	7.3 litres
Tuning frequency		Fs	67.6Hz



RESPONSE



↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	145	136	120	56	CW-2192	\$29.95	\$26.90	\$23.70

6.5" PAPER CONE WOOFER/MIDRANGE

Specifications:		Re	6 Ohms
Power handling	60WRMS	Qms	2.02
Nominal impedance	8 Ohms	Qes	0.57
Frequency response	44Hz - 7kHz	Qts	0.44
Sensitivity	89dB SPL @1W, 1m	Vas	19 litres
Tuning frequency		Fs	49.5Hz



RESPONSE



↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	178	168	145	77	CW-2194	\$34.95	\$31.45	\$27.90

8" PAPER CONE WOOFER

Specifications:		Re	6 Ohms
Power handling	90WRMS	Qms	1.46
Nominal impedance	8 Ohms	Qes	0.43
Frequency response	38Hz - 4.5kHz	Qts	0.33
Sensitivity	89dB SPL @1W, 1m	Vas	42-45 litres
Tuning frequency		Fs	28.1Hz



RESPONSE



↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	220	212	182	92	CW-2196	\$39.95	\$35.90	\$31.90

10" PAPER CONE WOOFER

Specifications:		Re	5.41 Ohms
Power handling	225WRMS	Qms	1.01
Nominal impedance	8 Ohms	Qes	0.47
Frequency response	40Hz - 1kHz	Qts	0.32
Sensitivity	90dB SPL @1W, 1m	Vas	21.8 litres
Tuning frequency		Fs	59.8Hz



RESPONSE



↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	258	245	235	110	CW-2198	\$59.95	\$53.95	\$47.90

12" PAPER CONE WOOFER

Specifications:		Re	5 Ohms
Power handling	225WRMS	Qms	3.46
Nominal impedance	8 Ohms	Qes	0.40
Frequency response	28 - 550Hz	Qts	0.36
Sensitivity	90dB SPL @1W, 1m	Vas	57.6 litres
Tuning frequency		Fs	23.1Hz



RESPONSE



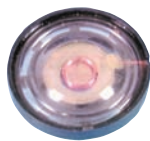
↑	A	B	C	D(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
	311	294	281	142	CW-2199	\$79.95	\$71.95	\$63.95

HOBBY & MICRO HI-FI SPEAKERS

ALL PURPOSE REPLACEMENT SPEAKERS

27mm (1.1")
Mylar
8Ω
250 mW

Mylar cone.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3002	\$2.95	\$2.60	\$2.30

40mm (1.5")
Mylar
8Ω
250 mW

Mylar cone.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3004	\$3.50	\$3.15	\$2.75

57mm (2.25")
8Ω

As used in many projects
8Ω, 250mW
Round (no mounting holes).



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3000	\$3.50	\$3.15	\$2.75

76mm (3")
8Ω

1 Watt. Round.
No mounting holes.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3006	\$4.25	\$3.75	\$3.30

50 X 90mm (2" X 3.5")
• 8Ω, 5 Watt
• Magnetically screened



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3025	\$6.95	\$6.25	\$5.50

100mm (4")
4Ω, 2 Watts
Diagonal mounting holes 115mm.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3008	\$4.75	\$4.15	\$3.75

125mm (5") ALL PURPOSE REPLACEMENT SPEAKER

- 4 Ohm
- 6 Watt (10W max)
- Resonant Freq.: 100Hz
- Diagonal mounting holes 120mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3007	\$7.95	\$7.10	\$6.25

DECIBELS

Contrary to much popular usage, the decibel (dB) is not actually a unit of any particular quantity, but rather an expression of the ratio between two quantities, such as, power, voltage, current, acoustic pressure. Many sensors, including our own ears, respond to stimuli in a logarithmic fashion, that is, an increase of 10dB Results in a doubling of loudness. This allows a huge range of intensities. As the dB compares the logarithmic quantities, it agrees with our perceptive comparisons. To calculate the ratio, in dB, of two power levels, P1 and P2, the formula is:

$\text{dB} = 10 \log (P1/P2)$

If the quantities are voltages, currents or sound pressure levels, X1 and X2, the formula becomes:

$\text{dB} = 20 \log (X1/X2)$

If the quantities X1 and X2 are both measured in the same impedances, their dB ratio will be numerically equal to the dB ratio of their equivalent powers. If their impedances Z1 and Z2 are unequal, the dB ratio of their power can be found from:

$\text{dB} = 20 \log (X1/X2) + 10 \log (Z2/Z1)$

Negative dB ratios will result when P1 (or X1) is less than P2 (or X2), while positive values indicate that P1 (or X1) is greater than P2 (or X2).

**LOOKING FOR OUR CROSSOVER DESIGN CHART?
CHECK THE PRIMERS SECTION ON OUR WEBSITE.**

FULL RANGE REPLACEMENT SPEAKERS

SHIELDED 1" 1W 8 OHM FULL RANGE SPEAKER

Full range speakers suitable for use in surround speakers in home theatre system, computer multimedia speakers and portable speaker designs. It has advanced alloy cone design coated with special damping material. See website for full specifications, frequency curves and technical drawings.

- Magnetically screened
- 4 x screw mounting holes
- Dimensions: 36(L) x 36(W) x 13.1(D)mm

General Data	
Nominal Power Handling (Pnom)(W)	1
Max Power Handling (Pmax)(W)	2
Sensitivity (2.83v/1m)(dB)	79
Weight (M)(Kg)	0.03

Electrical Data	
Nominal Impedance (Z)(Ω)	8
DC (Re)(Ω)	6.5

Voice Coil and Magnet Parameters	
VC Diameter (mm)	19
VC Length (H)(mm)	3.4
VC Former	CCAW
VC Frame	Kapton
Magnet Former	Neodymium
Force Factor (BL)(N/A)	2.3
Gap Height (He)(mm)	1.5
Linear Excursion (Xmax)(mm)	0.95



T-S Parameters	
Suspension Compliance (Cms)(uM/N)	626
Mechanical Q (Qms)	3.9
Electrical Q (Qes)	0.814
Total Q (Qts)	0.674
Moving Mass (Mms)(g)	0.56
Effective Piston Area (Sd)(m2)	0.0005
Equivalent Air Volume (Vas)(L)	0.04
Resonance Frequency (Fs)(Hz)	270

↑	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
	1"	AS-3030	\$10.95	\$9.75	\$8.75

SHIELDED 2" 10W 8 OHM FULL RANGE SPEAKER

Full range speakers suitable for use in surround speakers in home theatre system, computer multimedia speakers and portable speaker designs. It has advanced alloy cone design coated with special damping material. See website for full specifications, frequency curves and technical drawings.

- Magnetically screened
- 4 x screw mounting holes
- Dimensions: 53(L) x 53(W) x 30.5(D)mm

General Data	
Nominal Power Handling (Pnom)(W)	10
Max Power Handling (Pmax)(W)	20
Sensitivity (2.83v/1m)(dB)	78
Weight (M)(Kg)	0.12

Electrical Data	
Nominal Impedance (Z)(Ω)	8
DC (Re)(Ω)	6.5

Voice Coil and Magnet Parameters	
VC Diameter (mm)	25
VC Length (H)(mm)	6
VC Former	CCAW
VC Frame	Kapton
Magnet Former	Neodymium
Force Factor (BL)(N/A)	2.2
Gap Height (He)(mm)	3
Linear Excursion (Xmax)(mm)	1.5



T-S Parameters	
Suspension Compliance (Cms)(uM/N)	356
Mechanical Q (Qms)	4.6
Electrical Q (Qes)	2.2
Total Q (Qts)	1.56
Moving Mass (Mms)(g)	1.26
Effective Piston Area (Sd)(m2)	0.0013
Equivalent Air Volume (Vas)(L)	0.2
Resonance Frequency (Fs)(Hz)	260

↑	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
	2"	AS-3032	\$16.95	\$14.95	\$13.35

SHIELDED 3" 15W 8-OHM FULL RANGE SPEAKER

Full range speakers suitable for use in surround speakers in home theatre system, computer multimedia speakers and portable speaker designs. It has advanced alloy cone design coated with special damping material. See website for full specifications, frequency curves and technical drawings.

- Magnetically screened
- 4 x screw mounting holes
- Dimensions: 78(L) x 78(W) x 53(D)mm

General Data	
Nominal Power Handling (Pnom)(W)	15
Max Power Handling (Pmax)(W)	30
Sensitivity (2.83v/1m)(dB)	82
Weight (M)(Kg)	0.53

Electrical Data	
Nominal Impedance (Z)(Ω)	8
DC (Re)(Ω)	6.5

Voice Coil and Magnet Parameters	
VC Diameter (mm)	20
VC Length (H)(mm)	9
VC Former	Kapton
VC Frame	CCAW
Magnet Former	Ferrite
Force Factor (BL)(N/A)	3.06
Gap Height (He)(mm)	3
Linear Excursion (Xmax)(mm)	3



T-S Parameters	
Suspension Compliance (Cms)(uM/N)	920
Mechanical Q (Qms)	3.75
Electrical Q (Qes)	1.15
Total Q (Qts)	0.88
Moving Mass (Mms)(g)	2.6
Effective Piston Area (Sd)(m2)	0.003
Equivalent Air Volume (Vas)(L)	1.19
Resonance Frequency (Fs)(Hz)	100

↑	Size	Cat.	Qty 1+	Qty 4+	Qty 10+
	3"	AS-3034	\$19.95	\$17.70	\$15.70

SPEAKER SWITCHES

2 WAY SPEAKER SELECTOR SWITCH

This switch allows two pairs of speakers to be run from an amplifier with only one set of outputs, or two pairs of speakers from the one speaker cable. Listen to either pair of speakers separately, or both on together.

- Simple screw terminals accept speaker cabling.
- Supplied in a plastic case with rubber feet.
- Size 160(W) x 100(D) x 40(H)mm.
- Designed for 8 Ohm speakers.
- Power handling 50WRMS max per channel.



↑ 2 Way	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1640	\$19.95	\$17.70	\$15.70

5 WAY SPEAKER SELECTOR SWITCH

A home entertainment switch box that allows up to five pairs of stereo speakers to be connected to a Hi-Fi system through a single stereo output terminal. Each pair of speakers may be individually turned on or off in any combination. Also features a separate headphone output socket.

- Add 5 sets of speakers



↑ 5 Way	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1643	\$39.95	\$35.90	\$31.90

6 WAY SPEAKER SELECTOR SWITCH

This speaker selector box is perfect for anyone with a multi-room speaker system that they want to run from a master source. This selector box allows you to connect up to 6 pairs of speakers to your amplifier, and select any number of those pairs to play your music simultaneously. The outputs are all impedance matched so you won't ever damage the output stage of your amplifier.

- Solid metal construction
- Compatible with amplifiers up to 150 watts per channel
- Terminals accept up to 14-gauge wire
- Built-in protection circuit
- Dimensions: 285(W) x 180(D) x 55(H)mm



NEW
LOW
PRICE

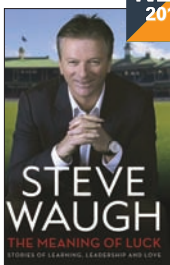
↑ 6 Way	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1683	\$129.00	\$115.95	\$102.95

MOTIVATIONAL BOOK

THE MEANING OF LUCK BOOK BY STEVE WAUGH

The Meaning Of Luck Book by Steve Waugh. In The Meaning of Luck, former Australian cricket captain and 2004 Australian of the Year Steve Waugh explores the concept of luck, based on his experiences in the worlds of sport, business and charity.

Steve begins by recalling the potentially devastating event that rocked his life in 2006, when his wife Lynette suffered a life-threatening brain bleed. Today, Lynette describes her illness as a stroke of luck, which she can do only because she fought so hard to regain her health and strength. She is lucky, but only because she chose to be. Lynette is the first of a number of characters in the book who have triumphed over adversity.



NEW
2015

Also featured are cricketers, coaches, business and community leaders, and some of the brave children Steve has come into contact with through his philanthropy in India and Australia. There are tales from Ashes Tests, World Cups and the Olympic Games. The stories in The Meaning of Luck carry messages about leadership, maximising potential and having fun. Together, they provide a guide for people seeking to progress not just in sport, but in whatever direction they choose for their lives.

- Hard cover, 307 pages.

Sold by Jaycar to assist the Steve Waugh foundation. The price of this book is heavily discounted.

BOOK

↑	Cat.	Qty 1+
	BC-1010	\$22.00

SPEAKER BRACKETS & STANDS

SPEAKER BRACKET & STANDS

This universal speaker mount is ideal for surround style speakers and home theatre applications. Compatible with many major brands of speakers it can be used for both ceiling and wall mounting. Features four axis, tilt and rotation adjustments. Extension and keyhole adaptors included. Designed for mounting small speakers up to 5kg (2kg if using the post mount option). Available individually or in a pack of two.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
1 Bracket	CW-2808	\$11.95	\$10.70	\$9.50
2 Brackets	CW-2809	\$24.95	\$22.35	\$19.70

SPEAKER WALL BRACKETS

Ideal for mounting home cinema effects speakers.

- Made from high grade glass reinforced nylon for durability
- Suits small to medium speakers up to 5kgs (11 pounds)
- Fully adjustable in all directions
- Supplied with a comprehensive range of fasteners for a variety of speaker types
- Black in colour
- Sold as a pair



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Pair	CW-2820	\$24.95	\$22.35	\$19.70

MINI UNIVERSAL SPEAKER BRACKETS

Well designed, made of super strong ABS plastic, this attractive two-piece swivel bracket is easy to install and adjust (Phillips head screwdriver required). Primarily designed for mounting small / medium sized speakers for surround sound setups, it could be used for mounting security lights, CCD cameras etc.

- Angle variation: Vertical 45°
- Horizontal > 180°
- Wall mount section dimensions: 46(W) x 93(H) x 61(D) mm
- Speaker mount dimensions: 41(W) x 83(H) x 61(D)mm
- Distance from speaker to wall: 80mm
- Two pieces supplied, one per speaker.
- Will hold up to 7.5kg



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Pair	CW-2804	\$24.95	\$22.35	\$19.70

ADJUSTABLE WALL SPEAKER BRACKET

If your listening room is a bit short on real estate, the answer may be to mount your speakers on the wall with a set of brackets. These brackets can be adjusted horizontally, vertically to tilt up to 20° or to fit speakers up to a depth of 370mm and as small as 80mm. Ideal for conference rooms, AV rooms, studios or small rooms where space is limited. Supplied as a pair.

- Each bracket holds up to 20kg
- Fits speakers from 150mm wide, 80mm deep
- All steel construction
- Black powder coat finish
- All fittings and hardware included



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Pair	CW-2840	\$39.95	\$35.90	\$31.90

CEILING / WALL SPEAKER BRACKET - STEEL

This sturdy bracket has main axis angle adjustment by a diecast, toothed plate secured by a wing nut. The detents won't slip as can happen with ball types. Minor axis adjustment is by a handwheel with backup by lock screw. As a safety measure a steel wire lanyard easily secures the two halves of the bracket - a good safety feature that is common in professional PA installations. The wall plate has holes for 4 x 6mm (or 1/4") screws. Another hole is provided for speaker wire egress. The speaker mounting plate has 4 x 4mm holes and also two slotted holes.

- Sold individually

Specifications	CW-2841
Max Speaker box weight	10kg
Angle Variation	Main - over 180° Minor - 360°
Wall mount plate	100(W) x 105(H) mm
Speaker mount plate	80(W) x 45(H) mm
Distance from speaker to wall	135mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Each	CW-2841	\$22.95	\$20.35	\$18.35

SPEAKER ACCESSORIES

SPEAKER BRACKETS & STANDS (CONTINUED)

EXTRA HEAVY DUTY SPEAKER TRIPOD STAND

This rugged stand extends to just under 2 metres and will support speakers, combo amps or lighting rigs up to and around 45 kilos. Tough rubber feet are mounted under each tripod leg for safe, non-slip support and there's even a steel stopper-rod which inserts into the extension shaft, preventing heavily weighted equipment from sliding the shaft back into the base. The speaker base itself includes both slotted and standard mounting holes to suit a wide range of PA related equipment. Made from strong aircraft grade aluminium for easy transportation & long service life.



- Support base max 1110mm.
- Use with our top hat HS-8035.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Each	CW-2860	\$99.95	\$89.95	\$79.95

SEE PAGE 406 FOR OUR RANGE OF AV WALL BRACKETS

ADJUSTABLE SPEAKER TRIPOD STAND

If you want to adjust the height with a traditional speaker tripod stand, you have to first remove the speaker then adjust the height of tripod and reinstall the speaker. Whereas with this advanced adjustable tripod, you can adjust the height up and down with a rotary hand crank. This heavy duty tripod stand made from sturdy steel and supports up to 80kg of equipment on it. Features anti-slip rubber feet and a locking pin.



Sold individually (i.e. two needed for stereo)

- Height adjustment: 1.4m - 2.2m
- Capacity: 80kg
- Material: Steel
- Upper shaft tubing: 35(Dia.)mm
- Length once folded: 1.15m

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	CS-2864	\$119.00	\$106.95	\$94.95

SPEAKER PROTECTION

POLYSWITCHES - SPEAKER PROTECTION

Low cost speaker protection. More specifications ensure accurate choice for better protection. Polyswitches will protect against electrical (current) overload and will protect speakers in most situations. They are not fullproof and will not protect against mechanical overload. Select the device based on its trip (power rating W), eg. if you need to protect a tweeter that will handle 10 Watts RMS and it's rated at 8 Ohms you would select an RXE075 device. If in doubt, be conservative. Some experimentation may be necessary since music signals can vary a great deal. Simply connect in series with the speakers you wish to protect. See primers section of website for more technical info.

How they work. Polyswitch protectors are based on conductive polymers and act like resettable solid state circuit breakers. When the operating current of the protector is exceeded the interior of the device partially melts, which suddenly increases the volume which increases the resistance drastically. This in turn reduces the current. The device stays in this state while the current is maintained because its temperature is elevated. Once the current is removed, the device re-establishes itself almost immediately, so that the low resistance value is restored.

Voltage ratings RN3460/62 - 60 volts; the rest are 50 volts.

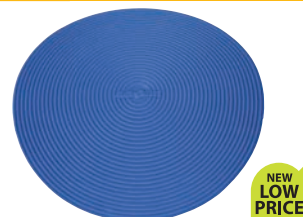
Cat.	Part No	Trip Watts 4Ω	Trip Watts 6Ω	Trip Watts 8Ω	Trip Current Amps
RN-3460	RXE075	5.1	7.7	10.2	1.50
RN-3462	RXE090	7.3	10.9	14.6	1.8
RN-3464	RXE110	10.9	16.3	21.8	2.2
RN-3466	RXE160	23.0	34.6	46.1	3.2
RN-3468	RXE185	31.4	47.0	62.7	3.7
RN-3470	RXE250	56.3	84.4	112.5	5.0

↑	Part No.	Cat.	Qty 1+	Qty 10+	Qty 25+
	RXE075	RN-3460	\$2.95	\$2.60	\$2.30
	RXE090	RN-3462	\$3.25	\$2.90	\$2.60
	RXE110	RN-3464	\$3.50	\$3.15	\$2.75
	RXE160	RN-3466	\$3.95	\$3.45	\$3.15
	RXE185	RN-3468	\$3.95	\$3.45	\$3.15
	RXE250	RN-3470	\$4.50	\$3.95	\$3.60

SOUNDPROOFING & DEADENERS

SOUND DAMPENING PAD - 12"

Mainly designed for car audio, but could be used in any speaker application. This pad is installed inside the door skins opposite the back of the speaker drivers. It absorbs standing waves and resonances so you get maximum performance. Includes cyanoacrylate glue for installation.



- Suitable for subs 10 - 15"

↑	Cat.	Qty 1+
12" Pad - Single	AX-3666	\$4.95

BUTYL BASED SOUND DEADENING MATERIAL

Give your vibrating buzz-box a luxury car ride with this butyl-based, foil backed sound deadening material. By adding weight to the metal panels of your car, such as door skins, boot lids, quarter panels, etc. you can stop nasty vibrations, reduce road noise, and give your doors and boot a nice solid "thud" when they shut. Each sheet is self-adhesive, and can be easily moulded, cut and stuck onto virtually any metal surface of your vehicle's body, giving you a pleasant, quiet and comfortable ride. Combine with our AX-3662 Sound Absorbing foam to add thermal insulation and eliminate low frequency humming from big exhaust systems for an even more comfortable vehicle interior.



- Thickness: 1.5mm
- Temperature range: -10 - 110°C
- Size: 900 x 330mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AX-3687	\$29.95	\$26.90	\$23.70

COMBINATION BUTYL/FOAM SUPER SOUND DEADENER

Combining both the sound deadening properties of butyl material, and insulating properties of honeycomb foam, this is an easy single application solution for complete sound deadening and isolation that also offers thermal insulation. Consisting of a layer of our AX-3687 Butyl Based sound deadener and a 3.0mm thick layer of honeycomb foam (similar to our AX-3662), lining the cabin of your vehicle with these sound deadening sheets will give you drastically reduced road noise, less panel vibration and a cooler cabin temperature. Application is easy with the self adhesive backing and the ability to mould to the shape of the panel. Ideal for door skins, head linings, door cards and under bonnet insulation.



- Thickness: 4.5mm (1.5mm butyl, 3.0mm foam)
- Temperature range: -10 - 100°C
- Size: 660 x 330mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AX-3689	\$29.95	\$26.90	\$23.70

SPEAKER CABINET & SOUNDPROOFING

650GSM ACRYLIC SPEAKER DAMPING MATERIAL

Used to line speaker boxes for standing wave/resonance absorption. Also very effective for making acoustic treatment like bass traps in sound rooms and studios.



- High density
- 700(W) x 1000(L) mm
- White in colour

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	AX-3694	\$12.50	\$10.95	\$9.95

SOUND ABSORPTION MAT FOR EQUIPMENT

The noise of modern equipment can really annoy end users. To solve this we have sourced this high quality sound absorption material which is quick and easy to install. The honeycomb material is chosen specifically due to its ability to reduce fan noise, vibrations, compressors and motors. Cooling fans in equipment is a particular annoyance to users and this material is perfect for reducing sound levels! With its self adhesive backing, just cut to size stick on the inside of your equipment & installation is completed. No mess or fuss. Made to UL94-VO flammability classification.



- Size: 140 x 180mm, 2 sheets per pack.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AX-3660	\$14.95	\$13.35	\$11.70

SPEAKER/EQUIPMENT CABINET FITTINGS

STRAP HANDLE

Incorporates metal sections on each end which hold the handle, and the rubber strap part returns flat after use. Total length 255mm x 27mm.

- Strap is steel reinforced.
- 2 x 8-10g screws required.

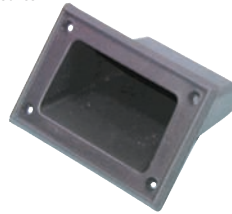
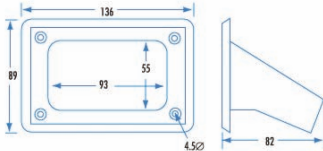


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	HS-8022	\$5.95	\$5.25	\$4.75

POCKET HANDLE

Suitable for chipboard speaker cabinets or metal enclosures.

- Panel cutout 102 x 48mm.
- 4 x 8-10g screws required.

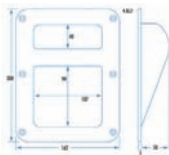


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	HS-8012	\$3.95	\$3.45	\$3.15

CABINET HANDLE

If you are having trouble lifting speaker cabinets, PA bins, or any large box, try these handles. They are easy to fit and make lifting a breeze.

- Just cut hole, drill holes & screw in.
- Dimensions 165(W) x 210(L)mm
- Cutout size 122mm x 164mm.
- 6 x 8-10g screws required



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	HS-8010	\$6.95	\$6.25	\$5.50

METAL CABINET HANDLE

Quality plated steel cabinet handle. Recessed handle with black rubber grip and spring return.

- Cutout size 128 x 74mm.
- 10 x 8-10g screws required.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Black	HS-8016	\$9.95	\$8.75	\$7.75

QUALITY EQUIPMENT FEET

You have probably seen new up market Hi-Fi equipment with large round feet - they give the piece of equipment a high class look. Well, now you can do it to your own gear. They are made of black rubber, with a silver metal edge on the bottom. They mount with a screw and nut (not supplied).

- Size - dia 43mm, height 13mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Each	HP-0834	\$2.95	\$2.60	\$2.30

PLASTIC LOCKING CORNER PIECE

Heavy duty plastic moulded corner fitting featuring male/female inserts. These are designed to fit together so that pieces of equipment (the same size) can be stacked up and locked together.

- Ideal for stacking speaker boxes
- Has 4 x 4mm pan head fixing holes
- Pack of 8
- Dimensions 84(H) x 50mm each side

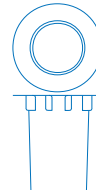


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Pkt 8	HM-3829	\$7.95	\$6.95	\$6.25

SPEAKER BOX PORTS

FLARED

These ports are flared to minimise air turbulence. They can be press fitted to the cabinet then sealed with caulk or silastic. Inner Dia: 58mm Length: 120mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	CX-2688	\$4.95	\$4.45	\$3.90

SPRAY-ON CONTACT ADHESIVE

This pressure-sensitive contact adhesive is in an aerosol can, and bonds to paper, fabric, leather, rubber, foam, vinyl, concrete, metal, in fact almost any surface! No more spills and dribbles from a tube, or sticky screwdrivers (and plastic applicators) from applying glue to a surface. Great for laying innerbond and speaker carpet in/on speaker cabinets etc.

- Size 400g.
- Cannot be sent by air freight or post.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NA-1504	\$16.95	\$14.95	\$13.35

GRILL CLOTH

High quality, acoustically transparent grill cloth is ideal for protecting expensive drivers and allowing all of the sound to get through.

- Supplied in a 1.5 x 1m pack.
- Black in colour



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	CF-2752	\$17.50	\$15.70	\$13.95

HOOK & LOOP TAPE

Ideal for holding grilles on speaker cabinets. One side is glued or stapled to the box & the other to the grille. The grille then sticks to the box.

- Ideal for many uses.
- 300mm long.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	CF-2763	\$2.95	\$2.60	\$2.30

LET'S FIND EVERYTHING YOU NEED!

FROM
\$4.95
HP-0620



SCREWS

P219

FROM
\$5.95
TD-2235



SCREWDRIVERS

P138

FROM
\$15.95
TH-2127



FILESAW

P145

FROM
\$19.95
TD-2493



DRILL

P137

ANTENNA LEADS & INDOOR TV ANTENNAS

TV FLYLEADS

75 OHM COAX CABLE MALE TO FEMALE

75 ohm coax cable, male to female. No extension!



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7367	\$3.50	\$3.15	\$2.75

TV COAXIAL PLUG TO TV COAXIAL PLUG

RG-59U coaxial cable. Double shielded cable.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7350	\$5.95	\$5.25	\$4.75
1.5m - White	WV-7363	\$5.95	\$5.50	\$4.75
3.0m	WV-7351	\$7.95	\$6.95	\$6.25
5.0m	WV-7352	\$9.95	\$8.75	\$7.75
10.0m	WV-7354	\$16.95	\$14.95	\$13.35

TV COAXIAL PLUG TO SOCKET

RG-59U coaxial cable. Double shielded cable.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7360	\$4.95	\$4.45	\$3.90
1.5m - White	WV-7364	\$4.95	\$4.45	\$4.00
3.0m	WV-7361	\$7.50	\$6.75	\$5.95
5.0m	WV-7362	\$8.90	\$7.95	\$6.95

F PLUG TO TV COAXIAL PLUG

RG-59U coaxial cable White version - WV-7366



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7384	\$4.95	\$4.45	\$3.90
1.5m - White	WV-7366	\$8.95	\$7.95	\$7.15
5.0m	WV-7385	\$9.95	\$8.75	\$7.75

F PLUG TO F PLUG

RG-59U coaxial cable White version - WV-7365



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7386	\$8.95	\$7.95	\$6.95
1.5m - White	WV-7365	\$4.95	\$4.45	\$4.00

INDOOR ANTENNAS

SLIM DIGITAL TV INDOOR ANTENNA WITH AMPLIFIER

This digital TV antenna is fitted with an LTE/4G filter which protects your TV from mobile broadband interference. It also features adjustable gain as well as telescopic dipoles and an adjustable loop aerial for optimal performance.



Specifications	
Max Output	90dBuV
Max Noise	1.5/1.8dB (VHF/UHF)
Frequency	VHF: 174-230MHz UHF: 470-694MHz
Dimensions	230(L) x 195(W)mm

Cat.	Qty 1+	Qty 2+	Qty 5+
LT-3206	\$39.95	\$35.90	\$31.90

TECH TALK!

INDOOR TV ANTENNAS?

Jaycar carries a great range of "indoor" type TV antennas in both passive & active gain models, which are good quality. Many people select such products hoping that they will offer satisfactory TV reception without the cost and/or hassle of a full outdoor TV antenna system. Often people who are renting premises cannot install a full TV antenna system anyway because they are not allowed to drill holes etc. The reality, however, is that indoor TV antennas rarely give totally satisfactory results.

The antenna element dimensions never correspond to broadcast frequencies for a start. Because you are inside, you may have no idea where the TV tower is anyway. Even if you knew where the tower was the antenna rarely has directional qualities. This makes the towers' location fairly meaningless. Trying to make an indoor antenna according to the laws of physics misses the point.

Despite this, indoor TV antennas can work amazingly well! Just don't get too scientific about it. They work best when you can throw a rock and hit the TV tower. As all the channels you will want to watch will not be in rock-throwing distance, some stations will work better than others. Wiggling the antenna around is really your only available technique. Indoor TV antennas are made for flat dwellers in large Western or Asian cities with high building density. In other words, all the TV towers will not be far away. If you live in a "spread out" city and cannot see a TV tower, it is highly likely that an indoor antenna will not solve your reception problems. There may simply be very little signal for you to pick up. Just imagine walking into a darkened room at night. Even with your eyes wide open you see virtually nothing until your eyes adjust to the conditions. At best you can see, say the white frame of a door. You certainly would not be able to read! You would not blame your eyes because you could not see but people frequently blame an indoor TV antenna in a similar situation for "not working"!

So when you buy an indoor antenna - from us or anyone else - don't expect a lot. If you bring the product back and say "it doesn't work", we know that you are really blaming the messenger. You may think that our words are a bit harsh but we respect both your time and your money too much to tell you what you need to hear, not what you want to hear.

The copy above relates mainly to Analogue TV systems. They are basically gone now but the need for an indoor or temporary TV antenna still exists. Let us Jaycar people take a position on this:

We do not like indoor TV antennas and if we could get away with it, we would not sell them.

The behavior of an indoor TV antenna can be ok, it can really be bizarre. If you are renting a flat and have a hopeless TV (Digital) reception you really need to get the landlord to fit a proper TV signal feed. Good Luck.

The TV Signal is still R.F. however, although digitally encoded. This means that the indoor antenna is still capable of picking up the radio frequency signal and converting it into a signal voltage. In all likelihood the antenna will pick up several versions of the R.F. signal at once. This is because R.F. being R.F. will have made its way to your antenna via several paths. It will be up to the front end of your TV receiver to distinguish the strongest signal and ignore the others. Modern TV front ends are pretty good at this.

So if you are in a rented flat and want to watch TV try one of our indoor antennas. Ours are as good as or better than anyone else's. If you are not happy with the performance of the antenna, keep the packaging, your receipt and bring it back to us if you feel you have to.

Just don't tell us that "...it does not work..." You will get your money back all right, but you might get a blank stare.....

UHF/VHF PASSIVE INDOOR TV ANTENNA - DESK OR WALL MOUNT

The traditional "rabbit" ears antenna for the modern day. With flat screen TV's, rabbit ear antennas no longer have the ideal spot sitting on top of the set. These rabbit ears can sit flat on a surface or be mounted on to a wall.

- Suits digital TV signals
- Mounting hardware included

Specifications	
Frequency range	VHF: 174-230MHz, UHF: 470-862MHz
Cable length	1.6m
Dimensions	195(W) x 15(D)mm

Cat.	Qty 1+	Qty 2+	Qty 5+
LT-3116	\$9.95	\$8.75	\$7.75



BUYING A DIGITAL READY ANTENNA?

What else will you need? We carry a comprehensive range of masthead and other amplifiers, antenna hardware, attenuators, baluns and modulators. Come into one of our Jaycar stores or stockists and ask our friendly staff.

INDOOR ANTENNAS (CONTINUED)

INDOOR FLAT PANEL UHF/VHF DIGITAL ANTENNA WITH AMP

An indoor antenna that will sit unobtrusively near your TV. An extremely capable unit featuring signal clear technology with extremely low noise circuitry. It is able to pick up both UHF/VHF signals as well as DAB+ radio. It is also coupled with a separate amplifier with independent UHF and VHF gain adjustments to give you greater control over your signal.



Specifications	
VHF Frequency	45-230MHz
UHF Frequency	470-862MHz
Output	Max 78dB
Channels	0-12 & 20-75
Impedance	75 ohms
Panel Size	480(L) x 109(W) x 54(D)mm

The amplifier can be powered with the supplied mains adaptor or from a USB cable (mini plug lead not supplied). Though the unit does not require the amplifier, it may be necessary for areas with weak indoor reception.

	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3156	\$44.95	\$40.45	\$35.90

DIGITAL INDOOR/OUTDOOR ANTENNA

As global television moves from analogue to digital, this indoor/outdoor digital antenna will be a great investment to your household. With its contemporary style design it may provide you with the high quality clear reception needed. The panel can be mounted to the wall; great for minimising space.



- AC adaptor included.

Specifications	
Frequency range	VHF - 174-230MHz, UHF - 470-862MHz
Antenna gain	10dB
Total gain	40dB
Impedance	75 ohm
Output	F female connector
Dimensions	502(L) x 235(W) x 76(H)mm

	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3137	\$99.95	\$89.95	\$79.95

AM / FM ANTENNAS

INDOOR AM ANTENNA

Stereo tuners aren't made with internal antennas. Most people listen to FM with their tuner, but for the rest who want AM, we have the answer - a loop antenna that can be easily left on top of your stereo cabinet or stored out of sight. It has built-in stand and fly leads to fit the antenna spring terminals on most tuners.



Specifications	
Frequency range	520 - 1660kHz
Dimensions	120(W) x 120(H)mm

	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3001	\$19.95	\$17.70	\$15.70

FM INDOOR ANTENNA

Simple ribbon type antenna (dipole) gives good performance in strong signal areas.



- 300Ω termination.

	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3002	\$4.95	\$4.45	\$3.90

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

DIGITAL ANTENNAS - OUTDOOR

OUTDOOR OMNI-DIRECTIONAL UHF/VHF AMPLIFIED DIGITAL ANTENNA

With inbuilt low noise and high gain booster, this compact and weather resistant outdoor digital antenna is ideally suited for caravans, boats, and other fixed or mobile applications where space is constrained or harsh environmental conditions require a little extra durability. Excellent wide frequency reception for local free-to-air analogue and digital TV, DAB+ digital radio as well as FM radio transmissions. It can be either base mounted or mast mounted and includes mounting bracket, 12V mains power adaptor and a 12V in-car charger.



Specifications	LT-3141
FM	87.5 - 108MHz
VHF	174-230MHz
UHF	470-862MHz
Output level	Max 108dB
Impedance	75 ohms
Receiver dish	350(Dia) x 60(H)mm
Mounting base	120(Dia) x 70(H)mm

- SMD technology
- Anti-rust and UV protected



	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3141	\$89.95	\$80.95	\$71.95

OUTDOOR UHF/VHF/MARINE TV ANTENNA

Digital ready. It rotates. Ideal for "grey nomads". This unit is ideal for the traveller. Because you could be in any part of Aust/NZ this antenna works on all frequencies. (Some better than others, we admit). It covers VHF low, down to 45MHz (channel 2) to 860MHz (channel 69).

It includes a signal amplifier and a rotator motor built into the antenna housing and a remote control for that. It also comes with approx. 8 metres of TV lead with a weatherproof plug on one end.

- 12VDC mains adaptor supplied
- Includes booster amp which will drive 2 x TV's
- Compatible with LT-3204 telescopic mast.
- Supplied with other hardware.
- Output 80 dBuV.
- Requires 1 x 2V A23



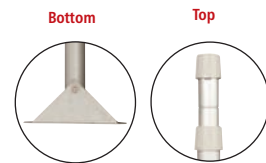
Antenna measures: 750(W) (deployed) x 300(L) x 100(D) (mm) (Folds down for storage)

	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3143	\$59.95	\$53.95	\$47.90

TELESCOPIC ANTENNA MAST

With adjustable height and durable aluminium construction, this versatile telescopic antenna mast is suitable for just about any domestic application as well as marine and mobile use. It has a maximum height of 4.5 metres and includes a base mount and three guy wires for ensured stability.

- Suitable for multiple antenna use
- Easy installation and height adjustment
- 36mm diameter
- Maximum height 4.5 metres



Ideal for Grey Nomads



	Cat.	Qty 1+	Qty 4+	Qty 10+
↑	LT-3202	\$64.95	\$58.50	\$51.95

CARAVAN/RV (GENERAL PURPOSE) MAST

We have had many requests and finally found one. This unit in natural finish anodised aluminium is a telescopic mast suitable for TV and other antennas. It will extend to 1.5 metres in 3 sections. The top section is 27mm dia. which is compatible with almost all TV antenna mounting hardware. The bottom section is 35mm dia. which would easily be accommodated by U-bolt or other clamping hardware (not supplied).



The top section has a sturdy cap and features a slot which enables you to neatly thread the coax lead down through the mast.

- Length extended: 1.5m



	Cat.	Qty 1+	Qty 4+	Qty 10+
↑	LT-3204	\$24.95	\$22.35	\$19.70

UHF/VHF ANTENNAS

UHF TV ANTENNAS WITH 4G LTE FILTER

TV antennas suitable for medium or deep fringe signal reception areas. Both feature an LTE filter to prevent interference from 4G/LTE mobile networks, which is housed within a waterproof dipole box with F-type connection.

- Easy assembly - just fold elements into position
- High quality waterproof F-type balun
- In-built filter for next-gen LTE/4G network signals

91 ELEMENT - CAT. LT-3182

Huge antenna suitable for deep fringe signal reception areas.

- Elements: 91
- Channels: 21 - 52
- Frequency range: 470 - 750MHz
- Gain: 14 - 16dBi
- Front-back ratio: 15 - 26dB
- Impedance: 75 Ohm
- Overall length: 2210mm



43 ELEMENT - CAT. LT-3181

Suitable for medium signal reception areas.

- Elements: 43
- Channels: 21 - 52
- Frequency range: 470 - 750MHz
- Gain: 11 - 13dBi
- Front-back ratio: 15 - 25dB
- Impedance: 75 Ohm
- Overall length: 1285mm



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
91 Element	LT-3182	\$89.95	\$80.95	\$71.95
43 Element	LT-3181	\$44.95	\$40.45	\$35.90

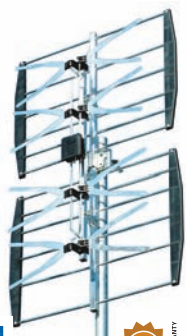
UHF PHASED ARRAY TV ANTENNA

This wideband phased array antenna suits analogue or digital TV and is ideal for country poor reception areas, where you have ghosting problems or are not in direct line of sight of the transmitter. (Gold Coast, Wollongong, Central Coast, Newcastle for example)

- Digital TV ready
- Band 4 and 5, 520 to 820MHz
- Elements: 36
- UHF Channels: 28 to 69 (28-52 with LTE filter on)
- Maximum gain: 12dB
- Front to Back Ratio: 20dB
- Includes F type PCB Balun
- Can be used for horizontal or vertical polarisation
- Dimensions: 840(L) x 540(W)mm

FOR COUNTRY DIGITAL AREAS

DIGITAL READY



Note: Not suitable for all areas.

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
36 Element	LT-3138	\$74.95	\$67.50	\$59.95

COMBINATION VHF/UHF DIGIMATCH ANTENNA

These Australian made heavy duty antennas are the ideal metropolitan antennas for Digital TV as they are capable of receiving digital and analogue TV on VHF channels 6-12 and UHF channels 21-69. The UHF section of the antenna employs X-type elements for wider bandwidth and higher gain, whilst the VHF section has elements made from high grade aluminium strong enough to withstand damage from birds. The VHF section of these antennas can be mounted horizontally or vertically for areas such as Canberra and Shepparton, making them suitable for all TV transmitters throughout Australia. Their overall design has improved figures for gain, VSWR and F/B ratio to give a superior carrier to noise ratio - this means more signal, less noise and therefore much lower chance of picture dropouts.

The Digital anti-reflection Matching System (DMS) employs a diplexer to electronically couple the VHF and UHF sections of the antenna together, giving 20dB isolation to achieve a better Bit Error Ratio (BER) and maximum digital performance.

- Ready for today and future UHF allocations and Plus One networks
- F-Type PCB balun & diplexer for quick installation and improved VSWR
- Black ABS UV resistant plastics
- 12.7mm dia. VHF elements
- Stainless steel screws
- Australian designed and manufactured
- Powder coated boom (blue)

DIGITAL READY



NOT AVAILABLE IN NEW ZEALAND

DIGIMATCH VHF/UHF X-TYPE

COLINEAR 27 ELEMENT

Receives Band 3, 4, and 5 (Channel 6-12 and 21-69)

Specifications	LT-3195
Elements	27
Gain	VHF 7dB, UHF 11dB
Avg. VSWR	1.9:1
Avg. F/B Ratio	VHF 12dB, UHF 18dB
Boom length	1320mm
Max width	900mm

Supplied in stout, compact cardboard packaging



DIGIMATCH VHF/UHF ECONOMY 7 ELEMENT

Receives Band 3, 4, and 5 (Channel 6-12 and 21-69). Perfect for caravans or space-conscious metropolitan areas. Designed to enable positions in all horizontal, vertical or horiz/vert. polarities

- Suitable for all transmitters across Australia
- High performance / Heavy duty construction
- Stainless steel connection screws
- Black UV resistant plastics / Powder coated boom
- Supplied in stout, compact cardboard packaging

DIGITAL READY

Specifications	LT-3172
Boom length	720mm
Max width	880mm



Includes FREE roll of Coax-seal (Cat. NM-2828)

NOT AVAILABLE IN NEW ZEALAND



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
27 Element	LT-3195	\$139.00	\$124.95	\$110.95
7 Element	LT-3172	\$84.95	\$76.50	\$67.95

LET'S FIND EVERYTHING YOU NEED!

4G/LTE FILTER FOR DIGITAL TV RECEPTION

Since the re-stacking of Digital TV transmissions has already begun, pretty soon 4G/LTE mobile phone signals will start being transmitted on the old UHF TV channels 52-69. Of course, this means that UHF antennas will be picking up those signals, and interfering with Digital TV reception. When this filter is plugged into the back of a digital TV receiver it will block unwanted signals from 4G/LTE mobile transmitters giving you clear uninterrupted TV reception.

- In-line coax connection
- Waterproof design
- Frequency pass range: 47-694MHz
- Insertion loss <1dB
- LTE band rejection: 720-1000MHz, 40dB



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3062	\$14.95	\$13.45	\$11.95

DIGIMATCH UHF/VHF DIPLEXER WITH DC BYPASS

If you want to install a VHF and a UHF antenna on the same cable, you'll need a diplexer. The design allows tilting for easy installation and the cable entry is sealed against the weather. Quality Matchmaster product suitable for Australia and New Zealand, supplied with heavy duty clamp.

- F connections for faster installations
- Fully screened for impulse noise reduction
- Weatherproof housing
- Suitable for Australia and New Zealand use
- HDTV compliant

Specifications	
UHF	470 - 862MHz
VHF	45 - 230MHz
Dimensions	112(W) x 108(H) x 35(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3082	\$29.95	\$26.90	\$23.70

UHF/VHF ANTENNAS (CONTINUED)

LOG-PERIODIC 32 ELEMENT VHF/UHF TV ANTENNA

Specifically designed with digital TV in mind, this combination VHF/UHF log periodic antenna picks up all the frequencies where digital TV is transmitted. The VHF band 3 elements fold in for compact packaging, are 7mm thick and made of heavy duty materials to minimise damage from our pesky Australian birdlife. Receiving only VHF band 3 (channels 6-12) and UHF bands 4 & 5 (channels 28-69) means doing away with those dastardly long elements which are only for picking up ABC analogue, the same ones that cockatoos love to sit on and destroy. All the plastics are UV stabilised and the balun has an F-type output for connection to your coax down lead. While not quite as strong as our Australian-made Digimatch antennas, this antenna offers similar performance in a cost effective, relatively compact package for receiving all your free to air digital TV channels with just one antenna.

Specifications	LT-3175
Elements	32
VHF	channels 6 - 12
UHF	channels 28 - 69
Gain	VHF 8dB, UHF 11dB
Avg.	F/B ratio: >20dB
Balun	F-type
Boom length	1130mm
Max Width	865mm

- Comes packed in a compact box to reduce postage costs, and includes mounting clamp and twist-on F connector with rubber boot.

DIGITAL READY

Matchmaster
TV Reception Systems
for the Best

NOT AVAILABLE IN NEW ZEALAND



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
32 Element	LT-3175	\$79.95	\$71.95	\$63.95

DIGIMATCH VHF BAND 3 ANTENNAS

Major metro cities in Australia are receiving their Digital TV broadcasts exclusively on VHF band 3 (channels 6-12). These fantastic heavy duty VHF Yagi antennas made exclusively for Jaycar by Matchmaster have all the features you expect - high grade 12.7mm diameter aluminium extruded elements, "G-unit" dipole, UV stabilised black plastic isolators, stainless steel hardware, blue powder coated boom, and a high grade F-type balun for superior digital performance. And let's not forget these are 100% Australia made! A sure bet for the best Digital TV reception in your home.



DIGITAL READY

Matchmaster
TV Reception Systems
for the Best

FOR METRO DIGITAL AREAS

NOT AVAILABLE IN NEW ZEALAND



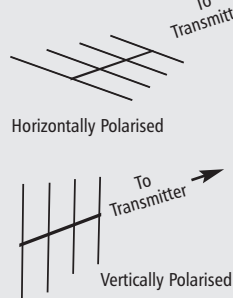
Two models available:
6 ELEMENT VHF BAND 3 ANTENNA Cat. LT-3161
10 ELEMENT VHF BAND 3 ANTENNA Cat. LT-3165

Specifications	LT-3161	LT-3165
Elements	6	10
Gain	8dB	9.5dB
Avg. VSWR	<2.2:1	<2.0:1
Max F/B ratio	19.4dB	21.5dB
Channels	6-12	6-12
Frequency	177.5	226.5MHz
Boom length	686mm	1548mm
Max width	900mm	900mm

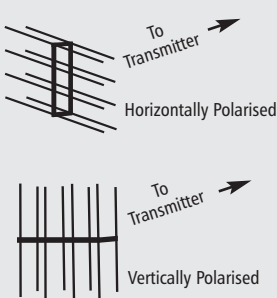
↑	Cat.	Qty 1+	Qty 2+	Qty 5+
6 Element	LT-3161	\$99.95	\$89.95	\$79.95
10 Element	LT-3165	\$149.00	\$133.95	\$118.95

SUITABLE TV ANTENNA DESIGNS

YAGI ANTENNAS



PHASED ARRAY ANTENNAS



Exceptions to the table shown here

- Gosford NSW and Gold Coast QLD requires blocks D and E to be horizontally polarised.
- Bourke and Wyong NSW require blocks D and E to be vertically polarised
- Currumbin and Gold Coast Southern Hinterland QLD require a unique antenna for channels 34, 35, 36, 37, 38, 39, 49, 50 with vertical polarisation
- Remote area towns (excluding WA) receiving Imparja and Southern Cross Television from a local transmitter generally require a Block A antenna for the ABC transmitter out of town and another antenna pointed in town in a different channel block.

A UHF/VHF diplexer can connect the antenna cables together to feed the receiver.

Acknowledgement: Thank you to Silicon Chip Magazine for allowing us to reproduce this from their November 2014 issue.

These antenna diagrams can help you identify the various types of TV antennas. The difference between the antennas for a particular polarisation is the element length and spacing which in turn is determined by the frequency or channel number.

	Block A	Block B	Block C	Block D	Block E
STRONG SIGNAL AREA					
Total Dipole Length (mm)	740	273	254	237	222
Gain (dBi)	7	10	10	11	11
Horizontal Polarisation	Yagi	Yagi	Yagi	Yagi	Yagi
Vertical Polarisation	Phased Array	Phased Array	Phased Array	Phased Array	Phased Array
MEDIUM SIGNAL AREA					
Total Dipole Length (mm)	740	273	254	237	222
Gain (dBi)	8	11	11	12	12
Horizontal Polarisation	Yagi	Yagi	Yagi	Yagi	Yagi
Vertical Polarisation	Phased Array	Phased Array	Phased Array	Phased Array	Phased Array
FRINGE AREA					
Total Dipole Length (mm)	740	273	254	237	222
Gain (dBi)	>10	>13	>13	>14	>14
Horizontal Polarisation	Phased Array	Phased Array	Phased Array	Phased Array	Phased Array
Vertical Polarisation	Yagi	Yagi	Yagi	Yagi	Yagi

LET'S FIND EVERYTHING YOU NEED!

75 OHM RG59 GAS INJECTED FOAM COAX

A 30m roll is generally a common length for a domestic TV antenna installation. Save over buying by the metre, and a small roll is easy to work with.



↑	Cat.	1+ Rolls	4+ Rolls	10+ Rolls
Black	WB-2005	\$19.95	\$17.95	\$16.20
White	WB-2001	\$21.95	\$19.75	\$17.75

BELDEN BRAND QUAD SHIELD RG6 75 OHM COAX

30m roll of the WB-2009 Belden Coax shown above



↑	Cat.	1+ Rolls	4+ Rolls	10+ Rolls
	WB-2014	\$44.95	\$40.45	\$34.50

EASY COAX CABLE STRIPPER WITH F-TYPE SPANNER

Quickly and easily strip coax cable. There is a switch to adjust what thickness coax cable will be stripped. Just put the end of the cable in and it will be spring locked in place, then just twist and you will have successfully stripped the end of the cable. There's also an F-type spanner on the opposite side so you can tighten your connections.

- Dimensions: 150(L) x 50(W) x 10(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1813	\$19.95	\$17.70	\$15.70

ROTARY COAX STRIPPER

This handy stripper will strip the outside jacket and inner conductor in one operation.

- Suitable for RG58/59/62/6 and 3C2V 75 ohm cable.
- Simply rotate the stripper clockwise around the cable 3 to 6 times. A quality stripper suited to installers.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1820	\$19.95	\$17.70	\$15.70

TV ANTENNA AMPLIFIERS & ACCESSORIES

SIGNAL FINDERS

DIGITAL TV SIGNAL STRENGTH METER

Take out the stress from installing your digital TV antenna by using this DVB-T signal strength meter. No more multiple trips up to your roof to get that perfect picture. Connect the pocket sized DVB-T signal strength meter and adjust the angle of your digital TV antenna, the easy to read LED indicator lets you know when you've hit the right spot. Adapters included.

- Requires 1 x 9V battery
- Frequency range: 40-862MHz
- Input Level: 50-90dBuV



	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3332	\$39.95	\$35.90	\$31.90

SATELLITE FINDER WITH LED DISPLAY

Align your satellite dish quickly and accurately with this handheld satellite finder. Connected between the satellite dish and set top box the meter displays signal strength on the 6 LED display. Once the meter picks up a signal use the adjustable sensitivity to fine tune the angle and lock in on the signal. A small compass is included to help you get the dish pointed in the right direction. Perfect for setting up permanent dishes as well as portable systems on caravans or RVs.

- Dimensions: 90(L) x 48(W) x 31(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LS-3302	\$24.95	\$22.35	\$19.70

SATELLITE ACCESSORIES

DISEQC™ 1.2 MOTOR WITH METAL GEAR

DiSeqC™ (pronounced "Die-Sec") is the signal protocol used between a satellite receiver and a dish rotor. This DiSeqC™ motor connects to the output of an LNB and to the input of a DiSeqC™ receiver or interface box. When you select a different channel on your receiver, the motor rotates the dish to the correct satellite position so you get the best picture. The motor also supports receivers with Goto "X" function for manual position adjustment.

Specifications	LS-3330
Protocol	DiSeqC™ 1.2 & Goto "X"
Compatible receiver	Receiver with DiSeqC™ 1.2 or Interface Box
Compatible antenna size	120cm max.
Satellite position	100 positions
Azimuth Angle	80° East - 80° West (160°)
Elevation Angle	25° - 75°
Speed	2.5°/second at 13V or 3.2°/second at 18V
Input/Output voltage	13/18VDC
Dimensions (mount)	345(L) x 168(H) x 110(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LS-3330	\$79.95	\$71.95	\$63.95

SATELLITE KU-BAND UNIVERSAL SINGLE LNB

LNB for satellite installations. Suitable for receiving all single and dual polarised Ku-band satellite signals (e.g. C1, Intelsat and Austar).

- Input Freq Range: 10.7 to 12.75GHz
- L.O. Frequency: 9.75/10.6GHz
- L.O. Frequency Stability: +/-2.5MHz
- Output Connector: 75 ohm F socket



	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LS-3320	\$29.95	\$26.90	\$23.70

DIPLEXER

DIGIMATCH UHF/VHF DIPLEXER WITH DC BYPASS

If you want to install a VHF and a UHF antenna on the same cable, you'll need a diplexer. The design allows tilting for easy installation and the cable entry is sealed against the weather. Quality Matchmaster product suitable for Australia and New Zealand, supplied with heavy duty clamp.

- F connections for faster installations
- Fully screened for impulse noise reduction
- Weatherproof housing
- Suitable for Australia and New Zealand use
- HDTV compliant

Specifications	
UHF	470 - 862MHz
VHF	45 - 230MHz
Dimensions	112(W) x 108(H) x 35(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3082	\$29.95	\$26.90	\$23.70

TELEVISION AMPLIFIERS/SPLITTERS

INDOOR DIGITAL TV AMPLIFIER UHF/VHF

A portable and compact amplifier capable of boosting signals to passive indoor TV antennas for both digital and analogue signals. It can be powered from the supplied mains adaptor or USB (mini plug available separately) and features independent manual UHF and VHF gain adjustments to give you greater control over your signal. In-built signal clear technology with low noise circuitry will help to give you the best possible picture and video. Standard PAL input and output connections.

Specifications	LT-3281
VHF Frequency	45 - 230MHz
UHF Frequency	470 - 862MHz
Gain	20dB
Noise	<3dB
Impedance	75 ohms
Dimensions	100(L) x 60(W) x 27(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 5+
↑	LT-3281	\$24.95	\$22.35	\$19.70

UHF/VHF/FM INDOOR AMPLIFIER TV SPLITTERS

Split and amplify your UHF, VHF or FM signals with these handy amplifier splitters. Features high gain and low noise to ensure your signal is of a high quality. Both units can be wall mounted for greater convenience.

- Mains adaptor included

Specifications	LT-3282	LT-3284
Frequency range	47 - 900MHz	47-900MHz
Output(max)	2 x 87dBuV	4 x 80dBuV
Gain Average	20dB	15dB/10dB (VHF/UHF)
Noise	<2dB	<5dB
Power	12VDC/50mA	6VDC/50mA
Dimensions	110(L) x 70(W) x 35(H)mm	158(L) x 80(W) x 45(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 5+
↑				
2 Way	LT-3282	\$24.95	\$22.35	\$19.70
4 Way	LT-3284	\$34.95	\$31.45	\$27.90

INDOOR TV AMPLIFIER/SPLITTERS

SINGLE OUTPUT

Such a simple and neat solution to boosting your TV antenna signals. The unit simply plugs into a mains outlet, and boosts your TV antenna signals through the F-type input and output sockets. There is also a mains output socket on the front so that you don't lose any power points behind your TV unit. Up to 20dB of amplification is provided, with a variable gain control.

Specifications	LT-3285
Frequency range	46-860MHz
Gain	20dB
Gain control	15dB VHF, 10dB UHF
Noise figure: only	<3.5dB
Dimensions	96(L) x 60(W) x 40(D)mm



FEATURES F SOCKETS

2 WAY

Boost your TV signal indoors. The antenna lead is plugged into the amplifier, and there are two outputs for two TVs, both which have a 12dB boost. One outlet can be used for FM stereo if desired. - Runs on 240VAC mains, and includes a LED power indicator.



4 WAY

A digital television splitter/amplifier for use in multiple receiver applications. The amplifier has F type input/output connectors and features variable gain on the VHF band. The unit operates from 240VAC and is mounted in a white ABS housing with integral mounting lugs. Size 60(W) x 40(H) x 85(L)mm. Adaptors are included to suit Belling Lee installations.

Kingray



Specifications	LT-3287
Frequency range	40 - 860MHz
Variable gain	0 - 6dB

Kingray

	Cat.	Qty 1+	Qty 2+	Qty 5+
↑				
Single Output	LT-3285	\$39.95	\$35.90	\$31.90
2 Way	LT-3288	\$49.95	\$44.90	\$39.90
4 Way	LT-3287	\$99.95	\$89.95	\$79.95

MASTHEAD AMPLIFIERS FOR DIGITAL TV

UHF/VHF DIGITAL TV MASTHEAD AMPLIFIER

A cost effective 26dB masthead amplifier suitable for digital, analogue, or HDTV reception. The unit is able to accept signals from separate UHF and VHF antennas, or UHF/VHF combination antennas, and output the amplified signal down a single cable. Features separate VHF and UHF gain controls, F-type connectors, weatherproof plastic housing and optional FM trap. Supplied with power injector, PAL Male to F-Male lead, 2 x PAL-Female to F-Male adaptors and power supply.

Specifications	LT-3275
UHF gain	26dB
VHF gain	18dB
Current consumption	80mA
Power supply	15VDC
Noise figure	UHF 1.5dB / VHF 2dB
Return loss	In 10, Out 8
HDTV Compliant	
Dimensions	125(W) x 102(H) x 45(D)mm

	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3275	\$54.95	\$49.45	\$43.90



VHF/UHF/HDTV MASTHEAD AMPLIFIER - DIGIMATCH

Designed in Australia specifically for harsh Australian conditions, this masthead amp is ideal for digital, analogue or HDTV reception in Australia or New Zealand. Suitable for use with either separate VHF and UHF antennas, or a single combination antenna. It also features separate adjustable gain on VHF and UHF for optimum signal. Supplied with full installation manual, mounting hardware and power supply. Waterproof housing and fully shielded.

- Heavy duty clamping system
- Suitable for bands 1-5
- Regulated power supply
- Adjustable inter-stage gain on UHF & VHF
- UHF gain: 10 - 30dB / VHF gain: 5 - 25dB
- Fully shielded
- AC power adaptor with F-type connection included
- Dimensions: 112(W) x 108(H) x 35(D)mm
- HDTV Compliant
- Switchable input
- Posistor protected
- F-type connectors



	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3270	\$69.95	\$62.95	\$55.95

Featuring the same quality Australian design and performance that has become synonymous with the Kingray brand, this new "KM Series" of masthead amplifiers brings you clear Digital (and analogue) TV reception for a more affordable price than previous models. A completely revised PCB design with advanced surface mount technology has allowed these new models to pack all the same performance and features into a much smaller package. Each unit features a shielded case, weather resistant UV stabilised outdoor plastic housing, adjustable gain controls, combined or separate antenna inputs (allowing either a combination VHF/UHF or separate VHF and UHF antenna inputs), and F-type connections. Two models available, with instructions and power supply included.

Kingray

KINGRAY SAM224FS 4 OUTPUT MASTHEAD AMPLIFIER

Australian design and high quality SMD construction leads to exception performance from this 4-output masthead amplifier from Kingray. Accepts a single "mixed" antenna input, and provides four amplified outputs for you to run to each wall point in your home. All connections are F-type to ensure best signal quality, and the circuit board is housed in a metal case to shield against noise. Includes power supply.

- Wide input range to suit all analogue and digital TV signals
- 4 individual amplified outputs
- Suitable for combined VHF/UHF antenna input
- Replacement power supply LT-3256



Kingray



Specifications	
Frequency range	44 - 860 MHz
Max gain	VHF 12dB, UHF 16dB
Gain control	11 - 14dB tilt
Noise figure	<3.5dB
Max output	100dBuV DIN45004B / -60dB IMR
Supply voltage	14VDC 70mA
Dimensions	105(W) x 90(H) x 35(D)mm

	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3253	\$79.95	\$71.95	\$63.95

REPLACEMENT POWER SUPPLIES FOR MASTHEAD AMPLIFIERS

- F-socket power injector.
- 14VDC@150mA - Cat LT-3256/LT-3251
- 17.5VAC@100mA - Cat LT-3258
- Connection: F-59

Kingray

NEW & IMPROVED



	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3258	\$24.95	\$22.35	\$19.70
	LT-3256	\$24.95	\$22.35	\$19.70

KINGRAY VHF/UHF MASTHEAD AMP WITH LTE/4G FILTERS

As you may be aware by now, a large chunk of the Australian TV broadcast spectrum is being reallocated for the next generation 4G/LTE mobile phone service. This is currently due to happen at the end of 2013, and early reports are suggesting that this reallocation of the spectrum may interfere with existing TV reception apparatus. To guard against this, Kingray have produced this Australian made masthead amp that provides a good VHF & UHF TV band gain, and user selectable filters for VHF bands 1&2, FM radio, fixed pagers, and the new 4G/LTE band.

- Supplied with AC power injector and F-type to PAL adaptors.
- Combination and separate VHF & UHF Antenna inputs

Kingray



Specifications	LT-3251
Frequency range	VHF 44-230MHz, UHF 520-860MHz
Gain	VHF 22-26dB, UHF 35dB
Gain control	VHF 16-12dB, UHF 15dB
Noise figure	VHF 3.5dB, UHF 2.1dB
Selectable filters	FM, LTE, VHF band 1 & 2, fixed pagers
Suitable power supplies	LT-3256, LT-3258 or LT-3259

A fantastic product proudly made in Australia.

	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3251	\$109.00	\$89.95	\$79.95

12V MASTHEAD AMP POWER INJECTOR

An easy solution to powering a masthead amp on a caravan, RV, camper trailer etc. It plugs into a cigarette lighter/12V power socket and feeds power for a masthead amplifier. Simply connect between the antenna down lead and your set top box. F-type connections fitted.

- Suitable with LT-3251 VHF/UHF masthead amplifier
- Ideal for Caravans and RV's



	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3259	\$34.95	\$31.45	\$27.90

FILTERS

4G/LTE FILTER FOR DIGITAL TV RECEPTION

Since the re-stacking of Digital TV transmissions has already begun, pretty soon 4G/LTE mobile phone signals will start being transmitted on the old UHF TV channels 52-69. Of course, this means that UHF antennas will be picking up those signals, and interfering with Digital TV reception. When this filter is plugged into the back of a digital TV receiver it will block unwanted signals from 4G/LTE mobile transmitters giving you clear uninterrupted TV reception.

- In-line coax connection
- Waterproof design
- Frequency pass range: 47-694MHz
- Insertion loss <1dB
- LTE band rejection: 720-1000MHz, 40dB



	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3062	\$14.95	\$13.45	\$11.95

TV ANTENNA ACCESSORIES & HARDWARE

ATTENUATORS

FIXED ATTENUATORS

Fixed attenuators are a handy way to resolve ghosting and reflections caused by too high a signal strength in RF or Video signals. BNC or F-Type fixed attenuators will address these problems.

- Made from solid brass body with nickel plating
- Bandwidth: 5MHz to 1GHz
- All are inline (male to female) and DC Blocking



NEW LOW PRICE



↑	Atten.	Cat.	Qty 1+
	BNC	3dB	LT-3053
	BNC	6dB	LT-3055
	BNC	12dB	LT-3057
	F Type	6dB	LT-3054

VARIABLE ATTENUATOR

May reduce ghosting in some cases. In certain situations you can actually receive too much TV signal. This attenuator (signal reducer) plugs in line and has a variable control. Supplied with two F sockets, maximum attenuation is 20dB.

TECH TALK!
FEATURES F SOCKETS



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3050	\$9.95	\$8.75	\$7.75

BALUNS

AUDIO/VIDEO RF MODULATOR WITH DISPLAY - STEREO

Converts the composite video and stereo audio signal from your DVD player, Pay TV, Camera etc into a standard UHF or VHF TV channel so you can watch the program via the antenna input of the TV. It is easy to connect and operate, and is supplied with a 9VDC mains adaptor and 1m Female to Male RF cable

- RCA AV input
- PAL antenna input
- PAL antenna output (TV)
- DC power supply input
- ON/OFF switch
- Channel adjustment (Up/Down key)
- LED channel number display



NEW 2015

Specifications	
Output:	VHF: 2-4CH, S1-S11 UHF: 21-69CH (471.25-801.25MHz)
Power cable length	1.8m
Dimensions	140(L) x 82(W) x 30(H)mm



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	LM-3880	\$49.95	\$44.90	\$39.90

OUTDOOR BALUNS

300 Ohm TO 75 Ohm - 'F' TYPE

Mounts on antenna. Converts natural 300Ω impedance of an antenna to 75Ω for coax. 'F' type female output. Eliminates saddle clamp termination. Requires F plug.



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3028	\$4.95	\$4.45	\$3.90

INDOOR BALUNS

75 Ohm TO 300 Ohm

75Ω socket for input and 300Ω ribbon cable output. Allows connection of any 75Ω output (video, TV games etc) to a TV with an older style 300Ω input.



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3022	\$4.50	\$3.95	\$3.60

ANTENNA HARDWARE

BARGEBOARD ANTENNA MOUNT - HOCKEY STICK

Simply bolts onto bargeboard (below gutter) or other support. 1800mm long, galvanised steel construction.

- Mounting plate: 215 x 65mm

LT-3200

LT-3212

305mm comes with U-bolt



LT-3212

U-CLAMP/V-BLOCK

For securely clamping mast sections, mounts, etc., at right angles.

LT-3235



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	LT-3200	\$27.95	\$24.95	\$22.35
	LT-3212	\$19.95	\$17.70	\$15.70
	LT-3235	\$4.50	\$3.95	\$3.60

ADJUSTABLE ANTENNA MOUNT BRACKET

Ideal for antenna installations with less traditional bargeboards. The base allows for an adjustable angle and contains a mast 1.5mm thick.

- Supplied with mounting hardware.
- Dimensions: 520(L)mm



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	LT-3205	\$24.95	\$22.50	\$19.95

DIGITAL TV ANTENNAS

The Digital Switchover was completed by Dec 2013. There are no more analogue T.V. transmissions in Australia. Despite a lot of media hype, there have been very few people caught unawares. We can now focus on maximising the enormous benefits of Digital TV. The following is a summary of what will continue.

Channel Re-Stacking

At the same time, the Australian Communications and Media Authority (ACMA) are using this Digital switchover as an opportunity to "re-stack" the broadcast frequencies, to simplify the broadcasting in different areas. It's quite simple; metro cities will have all Digital TV signal broadcast in VHF band 3, and regional/outer metro areas will be receiving their Digital TV on UHF frequencies.

What Does That Mean for You?

Well in most cases, not very much. You see, in metro cities the majority of Digital TV was already being broadcast on VHF band 3, with only SBS and some other community channels broadcasting on UHF. So where before you required a "combination" VHF & UHF antenna to pick up all Digital channels, you now only need a VHF band 3 antenna. That doesn't mean you need to rush out and buy a new antenna; in most cases your existing combination antenna will work just as well as it did before, it just won't be receiving UHF signals any more. For a new installation or replacement of an old antenna in a metro location, it means that you will only require a VHF band 3 antenna, that is optimised for VHF band 3 signals. Building on the introduced special digital antennas introduced in our 2013 catalogue, we now have new products in this catalogue to further enhance Digital TV viewing.

We now have, for example, a 4G/LTE filter on page 398. More LTE technology is discussed below, although some comments will date as things change over the year.

Proposed Spectrum Sell Off for Long Term Evolution Mobile Services (4G and beyond)

In order to keep pace with technology, and our increasingly insatiable appetite for wireless data communications, the ACMA is planning a sell-off of the upper end of current UHF TV frequencies, specifically the 700MHz spectrum. This spectrum is planned to be sold off to the Telcos for LTE technology, which is 4G and beyond mobile phone services. At the time of printing this auctioning of the spectrum has mostly occurred, but nevertheless the eventual sale could present an issue in households with TV antennas that receive UHF signals. It is not yet fully known what will be broadcast on this 700MHz spectrum, but there is every chance that whatever ends up on that spectrum could interfere with existing TV reception on the UHF bands. In order to prepare for this eventual sell-off of the spectrum, we have included "LTE band filters" on two of our brand name masthead amplifier products, as well as introduced an in-line LTE band filter.

As always, we do our best to keep paces with the changes in technology and the Digital TV landscape, so rest assured that no matter what lies ahead, Jaycar is your premier retail destination for TV antenna and reception equipment.

Note: Much of what has been said above has already happened by 2015 or is in an advanced stage of deployment.

SPLITTERS

INDOOR SPLITTER - 2 WAY

Allows you to connect two TV, video, games, FM receivers etc to one RF plug, so you can run multiple devices on one outlet.

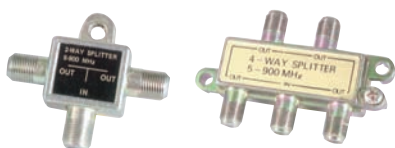
- Takes standard PAL RF connectors.
- 2 x female sockets to male plug.



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
2 Way	LT-3020	\$5.95	\$5.25	\$4.75

F CONNECTOR DIE CAST METAL CASE TV SPLITTERS

These splitters are sealed in a metal case with a mounting bracket. They are suitable from 5 - 900MHz, VHF, UHF TV and FM radio.



- Requires F type plugs - see plugs and sockets section for these.
- Supplied with mounting screws

They have power pass for masthead amps on all ports.
Low VSWR (Voltage Standing Wave Ratio).

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
2 Way	LT-3044	\$7.95	\$6.95	\$6.25
4 Way	LT-3045	\$9.95	\$8.75	\$7.75

SINGLE POWER PASS

These have power pass on the input to one output. This is to allow voltage up through the splitter to power a masthead amplifier or satellite dish LNA. These allow the voltage on one port only, so if anything goes wrong, all ports are not affected by low frequency shorts.



TECH TALK!
Low VSWR for Digital Performance

DIGITAL READY

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
2 Way	LT-3046	\$12.95	\$11.35	\$10.35
4 Way	LT-3047	\$17.95	\$15.95	\$14.35

INSTALLING YOUR OWN TV ANTENNA BOOKLET

Antennas play an important part in achieving the best picture for your TV set and are especially important for fringe area reception. This guide explains antenna basics and how to install them. Once you understand the basics you will be able to improve your reception and avoid common pitfalls. The guide includes information on current analogue frequencies and the new digital channels.

- 8 pages
- A4.



↑	Cat.	Qty 1+
	BI-8210	\$2.00

WALLPLATES & ACCESSORIES

LARGE BLANK WALLPLATE

This is a standard power point size white blank wallplate. Size 72 x 115mm. Ideal for many uses, including mounting TV antenna sockets, audio sockets, speaker terminals, low voltage outlets etc, etc.



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3035	\$4.95	\$4.45	\$3.90

FLUSHMOUNT 75 OHM TV WALL SOCKET WITH F59 CONNECTION

- Standard power point size.
- PAL socket output
- F59 connection at rear
- Mounting screws
- Dimensions: 71(W) x 115(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3065	\$4.95	\$4.45	\$3.90

PAL 2 SOCKET WALLPLATE - TV & FM

Standard power point size. Has two PAL sockets, one for TV and one for FM. Simply run one cable in from antenna.



- F59 rear connection
- Mounting screws included
- Dimensions: 115(H) x 71(W)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3066	\$6.95	\$6.25	\$5.50

WALLPLATE - MINI

Architrave type standard white wall plate with a cutout for the 75Ω snap-in insert shown below.



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3030	\$2.95	\$2.60	\$2.30

75 OHM INSERT

Clips into the mini wall plate shown above.



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3031	\$3.50	\$3.15	\$2.75

METAL MOUNTING BRACKETS FOR LARGE WALLPLATES

Suitable for plasterboard walls.



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3033	\$2.95	\$2.60	\$2.30

RECESSED CABLE ENTRY WALLPLATES

Create a neat cable entry/exit point for terminated or non-terminated audio and video leads. The wallplate design allows cables to be passed through walls with minimal fuss and the inner curved recessed design ensures maximum safety. Mounting screws included.



- Screw thread size: 2.5mm
- Small: 124(W) x 82(H) x 36(D)mm
- Large: 124(W) x 82(H) x 55(D)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	Small PS-0295	\$6.95	\$6.25	\$5.50
	Large PS-0297	\$6.95	\$6.25	\$5.50

F61 FLUSHMOUNT WALL SOCKET

Standard power point size.



- Accepts F59 plug both sides of this fitting.
- 71(W) x 115(H)mm.

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3040	\$4.95	\$4.45	\$3.90

FOXTEL® APPROVED 2 X F61 SOCKET WALL PLATES

For splitting your foxtel signal to two outlets. These wallplates are Foxtel® approved. We also have a model featuring an RJ12 socket to wire in your home phone.



FOXTEL® APPROVED 2 X F61 SOCKET WALL PLATE

FOXTEL® APPROVED 2 X F61 AND RJ12 SOCKET WALL PLATE



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3041	\$6.95	\$6.25	\$5.50
	LT-3058	\$7.95	\$6.95	\$6.25

75 OHM TV FLOOR SOCKET WITH F59 CONNECTION

Designed to mount on the skirting board or floor

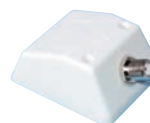


- 75 ohm impedance (standard).
- PAL socket output
- F59 connection at rear
- Mounting screws
- Dimensions: 50(L) x 30(W) x 25(H)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3063	\$3.95	\$3.45	\$3.15

F61 COAX FLOOR ENTRY

- White in colour.
- Size 58 x 46(base) x 27(H)mm.
- Accepts F59 plug both sides of this fitting.



↑	Cat.	Qty 1+	Qty 2+	Qty 5+
	LT-3042	\$3.50	\$3.15	\$2.75

COAX SEAL TAPE

This versatile material looks like ordinary PVC electrical tape but is actually a handy sealing system that fuses together to form a removable, waterproof seal once it has been applied. The tape has many uses such as waterproofing outdoor coax connections, sealing low pressure vacuum lines, or even as an alternative to heat shrink tubing when access is difficult.



- 12mm wide x 1.5m long.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	NM-2828	\$12.95	\$11.35	\$10.35

RAINCHECK!

If your local Jaycar store has sold out of a currently advertised line we will be happy to issue you with a 'raincheck'.
Conditions apply - see page 528 for details.

AV SENDERS

WIRELESS AV SENDERS

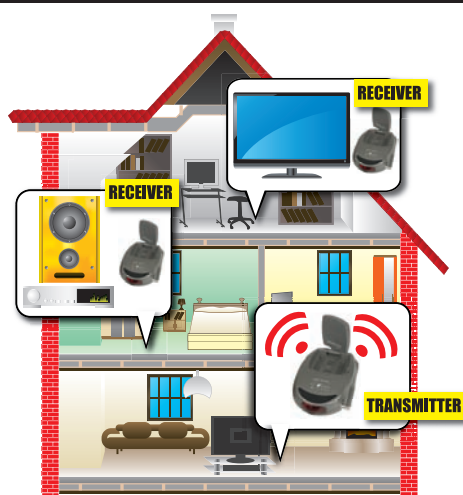
AV Senders transmit audio and video across the home, office or building wirelessly, saving you from running messy wiring between rooms. Great for watching videos from a Blu-ray player, XBOX™, PS3™, etc from another room, or use to save on additional PayTV Set Top boxes.

Digital and 5.8GHz technology make them much less susceptible to interference so you get a clear picture.

All models feature a built-in infrared repeater so you can change the channel, etc from the other room, and the AR-1910 and AR-1912 support modern PayTV remotes with their wideband infrared capability.

WIRELESS 5.8GHZ AV SENDER/RECEIVER WITH WIDEBAND IR EXTENDER

Transmits audio and video to receivers around the home or office without the hassle of running cables, crimping, or crawling into wall cavities. Uses 5.8GHz technology to avoid interference and supports wideband infrared frequency to ensure suitability with a modern remote controls, including Pay TV remotes. Includes power supplies and composite RCA AV cables for easy connection to a TV display. Utilises a dipole antenna for superior audio and video quality.



Transmitter Specifications	
Frequency	5.8GHz
Channel number	7
Range	50m
Transmitting power	14dBm
Antenna	Dipole
Supply voltage	9V/660mA
Dimensions	145(W) x 92(L) x 43(H)mm

Receiver Specifications	
Frequency	5.8GHz
Receiver sensitivity	-85dBm
Channel number	7
Supply voltage	9V/660mA

Spare receiver available separately: AR-1911



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Transmitter / Receiver	AR-1910	\$99.95	\$89.95	\$79.95
Spare Receiver	AR-1911	\$54.95	\$49.45	\$43.90

WIRELESS 2.4GHZ DIGITAL HDMI AV SENDER/RECEIVER

A low cost solution AV sender designed to transmit high definition audio and video signals from your HD equipment to your HDTV or HD monitor without the use of long cable runs. Simply connect a HDMI cable from the transmitter to your HD device (Blu-Ray player, set-top box), then connect another HDMI lead from your receiver to your HDTV or HD monitor and you're ready to go. There's also an IR receiver/extender built-in so you can also use your remote to control the source from another room. Couldn't be easier!

- Transmit clear 1080p resolution video
- Security ID coded communication ensure privacy
- 2 x 1m HDMI leads included
- 5VDC Power supplies included
- Video modulation/demodulation: BPSK, QPSK, 16-QAM

Video Receiver	
Supply voltage	5VDC
Supply current	180mA
Input Jack	HDMI
Antenna gain	5dBi
Output image resolution	Up to 1080p
Dimensions	151(L) x 116(W) x 26(H)mm

Specifications	
Channel switching	FHSS mode up to 80 channels
RF bandwidth	12Mbps
Transmission range	100m clear line of sight

Video Transmitter	
Supply voltage	5VDC
Supply current	180mA
Input Jack	HDMI
Antenna gain	5dBi
Dimensions	151(L) x 116(W) x 26(H)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Transmitter/Receiver	AR-1871	\$199.00	\$178.95	\$158.95

WIRELESS 5.8GHZ 1080P HDMI SENDER/RECEIVER KIT

Transmit HDMI signals wirelessly around the home or office. A convenient solution for when long HDMI cable runs are not desired or practical. This unit uses 5.15GHz - 5.82GHz digital frequency ranges to avoid interference and two high performance omnidirectional antennas to improve transmission range and reception. It will transmit clear line of sight signals to a receiver up to 35m away. Features a built-in IR remote extender which allows control of the transmitting source from other rooms. Great for use in foyers, bars, and other entertainment venues.

- Wide band IR Carrier Frequency 36kHz - 60kHz
- 32-bit MCU, 160MHz 8KB memory cache
- Wireless 5GHz frequency band transmission (5.15 - 5.82GHz)
- Up to 35m clear line of sight transmission range
- Two omnidirectional 5dBi antennas for both transmitter and receiver
- Full HD 1920x1080@30fps video resolution
- Up to 2M pixel still image resolution
- Stereo or 7.1 channels surround audio
- Transmit audio & video source from receiver
- Supports AC97 controller for audio
- PAL & NTSC compatible
- HDMI 1.4
- Receiver/Transmitter dimensions: 147(L) x 97(D) x 30(H)mm

- Video resolutions:
- 640X480 @ 85fps
 - 1024X768 @ 75fps
 - 1600X1200 @ 30fps
 - 1280X720 @ 60fps
 - 800X600 @ 85fps
 - 1280X1024 @ 60fps
 - 720X480 @ 60fps
 - 1920X1080 @ 30fps

- Box contents:
- 1 x Transmitter with two detachable antennas
 - 1 x Receiver with two detachable antennas
 - 2 x Switchmode power adaptors (Mini USB plug)
 - 1 x IR LED cable
 - 1 x User manual



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
	AR-1912	\$299.00	\$269.00	\$239.00

REMOTE CONTROLS

REMOTE CONTROL FOR RECORDABLE DIGITAL PAY TV

Replace your lost or broken pay TV remote control at a fraction of the cost of the genuine brand names, or just keep a spare. Including buttons to control the special record, live pause and playback features of the latest recordable digital Pay TV services, you will have complete control over your Recordable Pay TV subscription.

- Compatible with recordable pay TV set top boxes
- Operates all TV essential functions
- Includes controls for record, live pause and playback features
- Requires 2 x AA Batteries
- Approx 210mm long



NOT AVAILABLE IN NEW ZEALAND

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1737	\$19.95	\$17.70	\$15.70

6 IN 1 USB PROGRAMMABLE UNIVERSAL REMOTE CONTROL

Unlike a conventional universal remote control, the database of codes for this remote control is stored on, accessed and shared via your PC. Use the provided software for easy setup or to individually assign a function to each button. Regular updates ensure the database is up-to-date and that a new upgrade (a TV for example) doesn't render your remote control useless. Not only can it learn new IR codes, but should you forget the make and model of your device, it can search for a set of IR codes that best matches the remote control.

- Control up to 6 devices (TV, SAT, DVD/VCD, AUX)
- Database search, database import, export and upload
- Customisable or use original remote control settings
- Regular database updates
- IR code learning
- Up to 4 macro buttons
- Advanced IR code search
- Requires USB2.0, plug and play, no additional drivers required
- Requires 3 x AAA batteries (not included)
- USB cable supplied.
- Compatible with Windows 2000/XP/Vista/7
- Dimensions: 190(L) x 48(W) x 20(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1719	\$29.95	\$26.90	\$23.70

AIR CONDITIONER REMOTE

UNIVERSAL REMOTE CONTROL FOR AIR CONDITIONERS WITH BACKLIT LCD

A feature rich replacement for a lost or broken air-con remote. The unit has an easy to read blue backlit LCD for night control and all the buttons you'll need to control most functions of your air conditioner. Standard temperature controls, swing, vane, fan, timer, sleep mode and more are all featured on the control. This unit is compatible with most air conditioners capable of identifying with up to 2000 models. It also conveniently shows the time.

- Requires 2 x AAA batteries
- Includes mountable cradle for remote
- Switch between degrees Celsius and Fahrenheit display
- Dimensions: 165(L) x 55(W) x 25(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1731	\$24.95	\$22.35	\$19.70

SET TOP BOXES

HD DIGITAL TV SET TOP BOX WITH USB RECORDING PLAYBACK

Digital and HD ready. This compact set top box unit receives crystal clear free-to-air digital TV in high definition. It incorporates a USB port for AV program recording as well as playback. Navigation is simple and easy with the full function remote control. Outputs are HDMI, component video and composite video.



- On-screen menus
- Selectable aspect ratio 4:3/16:9
- DVB-T & MPEG-2 HD & SD compliant
- Supports up to 1080i resolution
- Remote requires 2 x AAA batteries.
- Dimensions: 220(W) x 140(D) x 42(H)mm
- Spare remote: Cat. XC-4915 (sold separately)

Note: Not available in New Zealand

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
HD Set top box	XC-4917	\$69.95	\$62.95	\$55.95
Spare Remote Control	XC-4915	\$9.95	\$8.75	\$7.75

HDTV TO SMART TV CONVERTER

HDMI DISPLAY RECEIVER

Turn your HDTV into a Smart TV! This clever device allows you to stream videos, music and photos wirelessly from your computer or DLNA enabled Android Smartphone or Tablet. Connect using HDMI to your TV and access and control media, including browsing the Internet on your Windows or Mac® using a USB mouse and/or keyboard (available separately). It also smartly doubles as a Wi-Fi router, just connect it to your current router and you'll be able to access the internet on Wi-Fi enabled laptops or Smartphones. Supplied with software and power adaptor. HDMI cable available separately.



- Requires 802.11n capable Windows/Mac® PC for optimal wireless performance
- DLNA Supported media
- Video: AVI, ASF, WMV, MKV, MP4, MOV, 3GP, TS, RM, FLV, MPG
- Audio: LPCM, MP3, AAC, WMA
- Image: JPEG, PNG
- Dimensions: 130(L) x 64(D) x 20(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1914	\$139.00	\$124.95	\$110.95

SCREEN MAINTENANCE

LCD SCREEN CLEANING KIT

Keep your computer, TV and other LCD screens clean with this easy to use kit. Remove dust and fingerprints without streaking, scratching or staining. The special solution removes those greasy fingerprints and the elastic anti-static brush and scratch free microfibre cloth are excellent for eliminating dust and grime.



- Elastic anti-static Brush
- Drip-free cleaning solution
- Special microfibre material which is capable of preventing panel scratch and will not harm LCD protective coating.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1418	\$11.95	\$10.70	\$9.50

LET'S FIND EVERYTHING YOU NEED!

FROM
\$59.95
AR-1828



INFRARED EXTENDERS P416

FROM
\$4.95
AR-1415



MINI SCREEN CLEANER P491

FROM
\$9.95
WV-7914



HDMI CABLES P424

FROM
\$1.95
SB-2426



BATTERIES P323

TV MOUNTING BRACKETS

WALL BRACKETS

MONITOR WALL BRACKETS

DOUBLE ARM LCD MONITOR BRACKET

Specifications	CW-2813
Type	LCD Double Swing Arm, Wall Mounting
Max Weight	22kg (50lbs)
Mounting System	VESA 50 x 50, 75 x 75, 100 x 100
Tilt Angle	5° up, 20° down
Swivel Angle	160° left & right

Cat. CW-2813



LCD MONITOR WALL BRACKET

Specifications	CW-2814
Type	Wall Mounting
Max Weight	5kgs (11lbs)
Mounting System	VESA 50 x 50, 75 x 75, 100 x 100
Tilt Angle	20° up and down
Swivel Angle	120° left and right

Cat. CW-2814

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Double Arm LCD	CW-2813	\$69.95	\$62.95	\$55.95
LCD Wall	CW-2814	\$39.95	\$35.90	\$31.90

VESA BRACKET ADAPTOR

UNIVERSAL VESA ADAPTOR

Adapt any VESA mounting TV to any bracket. Many LCD or plasma brackets on the market are only designed to take TVs with standard 200mm or larger mounting centres, thereby limiting the range of brackets you can use with some TVs. This handy adaptor solves the problem by providing centres for 100, 200 and 300mm VESA mounts.

- Solid steel construction, black finish.

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	CW-2815	\$24.95	\$22.35	\$19.70

TV MOUNTING BRACKETS

PLASMA/LCD TV CEILING MOUNT BRACKET FOR 32-60" 80KG

An innovative bracket that allows professional mounting of flat screen TVs hanging from a ceiling. The heavy duty 280x280mm ceiling mount plate will safely and securely hold the TV in place so people can comfortably view a program in a foyer, a medical waiting room, hallway, or at home. It features integrated cable management which contains, protects, and conceals power/video cables for a clean clutter-free look. The patented tilt system allows 15 degree up or down angle adjustment to obtain the optimum viewing angle.

- Tilt and rotate for maximum viewing flexibility
- 280x280mm plate to fix the bracket to the ceiling structure
- Decorative ring for plaster ceilings
- Integrated cable management
- Solid aluminium and steel construction
- Universal hole pattern fits most flat panel screens
- Maximum load: 80kg
- Recommended screen sizes: 32" to 60"



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	CW-2855	\$169.00	\$151.95	\$134.95

ABOUT VESA MOUNTING STANDARDS

The Video & Electronics Standards Association (VESA) has issued suggested standards for the attachment mounting systems for electronic visual displays also known as the Flat Display Mounting Interface. This is a family of standards defined by VESA for mounting flat panel monitors, TV's and other displays to stands or wall mounts, it is used on most modern flat-panel monitors and TV's.

Whilst these standards are quite detailed the basic details of the standards involve the size of the display and the relevant spacing and sizing of the hole to mount the display.

The dimensions vary from 75 x 75mm to 800 x 400mm.

PROJECTOR BRACKETS

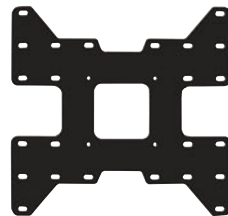
CEILING-MOUNT

Designed to fit most of the projector models on the market, this bracket can be rotated through a full 360° and extends up to 370mm. Suitable for home theatre, conference rooms, AV rooms, media centres etc. Mounting hardware and instructions included.

- Rigid extruded aluminum construction
- Durable silver powder-coated finish
- Supports up to 15kgs
- Easy to install
- Cable management included
- Mounting hardware included
- User manual included
- Dimensions: 182(W) x 235 - 370(H) x 182(D)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Projector Mount	CW-2827	\$79.95	\$71.95	\$63.95



TV MOUNTING BRACKETS (CONTINUED)

PLASMA/LCD/LED TV WALL BRACKETS

No longer is it an expensive exercise to impress your friends and neighbours with the contemporary styling of a wall mounted LCD or Plasma TV. Our range of universal LCD and plasma TV brackets will be perfect for most installations, suiting panel sizes from 23" up to 60" and weighing up to 80kg - and the prices will leave plenty of room in the budget for a new set of AV cables and wall plates to complete the installation.

Four types available:

SUITS PANELS 23" TO 37" - 45kg

Is the smallest model, designed for LCD TVs from 23 - 37" in size and weighing up to 45kg. Despite the low price, it's still solidly made and features a security locking bar. It can be mounted flat or at a fixed tilt angle of 5°, whilst the TV is only spaced 38mm from the wall. Mounting plate is 525mm wide.
Cat. CW-2826

SUITS PANELS 32" TO 60" - 80kg

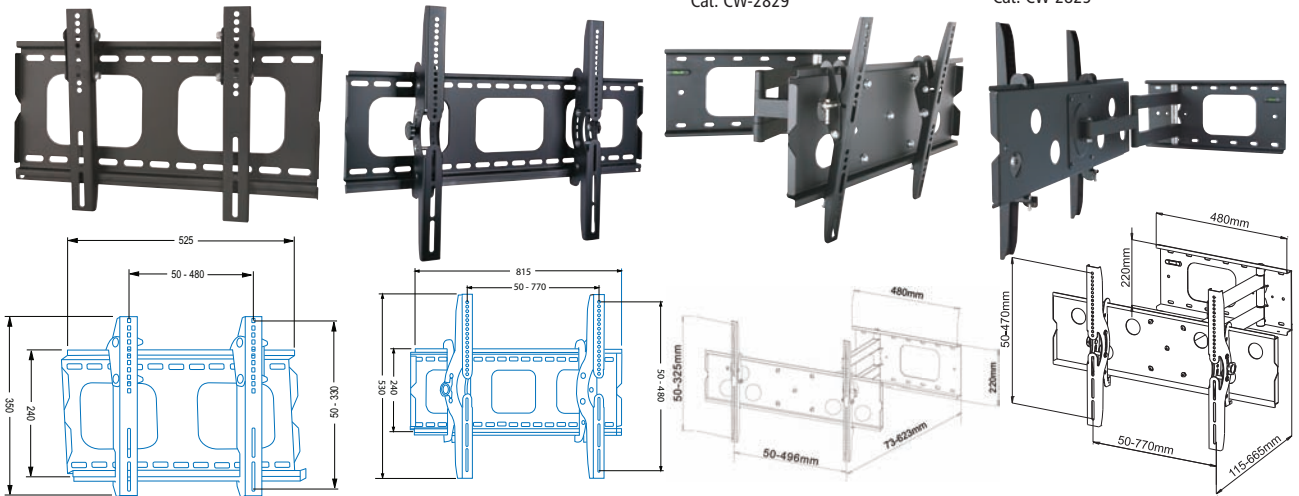
Is the basic model for the larger LCD and plasma TV sets, suitable for panel sizes from 32 to 60" and weighing up to 80kg. This model has an adjustable tilt feature to allow +/-15° tilt and will position the TV 8cm from the wall. Also features a security locking bar to deter against theft. Mounting plate allows installation on either 450 or 600mm stud centres.
Cat. CW-2822

SUITS PANELS 23" TO 37" - 45kg

Provides full motion off the wall. The 620mm extension arm gives a range of rotation of 180° and tilt of -12°, so it is ideal for mounting in the corner of a room, or mounting the TV in an otherwise awkward and unviewable position. This model also allows for 2° lateral roll to ensure the TV is perfectly level after installation. Accommodates TVs from 23 to 37" up to 45kg.
Cat. CW-2829

SUITS PANELS 32" TO 60" - 80kg

Provides full motion. The 660mm extension arm gives a range of rotation of 180° and tilt of ±15°, so is ideal for corner mounting, or mounting the TV in an otherwise awkward and unviewable position. It also allows for ±2° lateral roll to ensure the TV is perfectly level after installation. This model also accommodates TVs from 32 to 60", up to 80kg, and installation on 450 or 600mm stud centres.
Cat. CW-2825



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Suits panels 23" to 37" - 45kg	CW-2826	\$39.95	\$35.90	\$31.90
Suits panels 32" to 60" - 80kg	CW-2822	\$89.95	\$80.95	\$71.95
Suits panels 23" to 37" - 45kg	CW-2829	\$109.00	\$97.95	\$86.95
Suits panels 32" to 60" - 80kg	CW-2825	\$149.00	\$133.95	\$118.95

ULTRA SLIM LED/LCD TILTING WALL MOUNTS

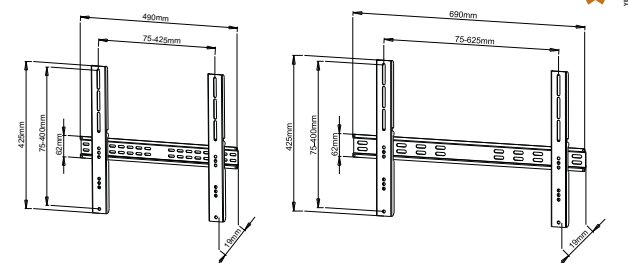
Ultra thin tilting wall brackets for new LED/LCD TVs allow 15° of tilt and mount only 19mm from the wall once closed for optimal viewing experience. Heavy duty steel construction for maximum support and effortless adjustment designed to give your expensive TV a professional look. Mounting hardware and instructions included.

- Mounting profile: 19mm
- Load capacity up to 25kg
- VESA standard compliant

Two models available:

For 23" - 55" LCD/LED TV Sets CW-2836

For 40" - 65" LCD/LED TV Sets CW-2838

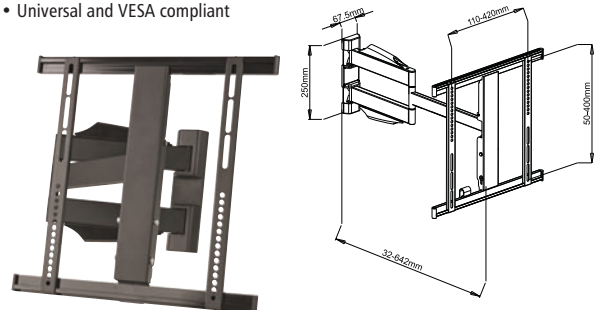


↑	Cat.	Qty 1+	Qty 5+	Qty 10+
23" - 55"	CW-2836	\$39.95	\$35.90	\$31.90
40" - 65"	CW-2838	\$49.95	\$44.90	\$39.90

ULTRA SLIM LED/LCD ARTICULATING WALL MOUNTS

Tilt, pan and swivel for maximum viewing flexibility - perfect for corner mounting your new flat screen TV. This ultra thin articulating wall bracket for new slim-line LED/LCD TVs allows 15° of tilt and 180° of swivel while mounting the TV only 32mm from the wall at minimum, and 642mm at full extension. Solid aluminium and steel construction for stable installation and nylon washers for fluid movement. Also features a cable management system to protect and conceal cables for a clean clutter-free look. Mounting hardware and instructions included.

- Universal and VESA compliant



Specifications	CW-2852
Tilt	15°
Swivel	180°
Mounting profile	32mm
Maximum extension	642mm
Load capacity	up to 25kg
Suitable for	32-55" flat screen TVs



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	CW-2852	\$119.00	\$106.95	\$94.95

WALLPLATES & KEYSTONES

AV WALLPLATES, KEYSTONES & INSERTS

Ideal for HDMI extenders.

RECESSED CABLE ENTRY WALLPLATE

Create a neat cable entry/exit point for terminated or non-terminated audio and video leads. The wallplate design allows cables to be passed through walls with minimal fuss and the inner curved recessed design ensures maximum safety.

- Mounting screws included.
- Screw thread size: 2.5mm

SMALL

• Dimensions 124(W) x 82(H) x 36(D)mm
Cat. PS-0295

LARGE

• Dimensions 124(W) x 82(H) x 55(D)mm
Cat. PS-0297



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
Small	PS-0295	\$6.95	\$6.25	\$5.50
Large	PS-0297	\$6.95	\$6.25	\$5.50

BRUSHED REAR CABLE ENTRY WALLPLATE

Allows you to run pre-terminated cables through a wall. Brushed entry and concave extrusion will help protect against dust and keep the cables secured.

- Great for use with HDMI, Cat5, component/composite, S-video, and a variety of other cables.



Cat.	Qty 1+	Qty 5+	Qty 10+
PS-0296	\$9.95	\$8.75	\$7.75

BRUSHED CABLE ENTRY WALLPLATE

Single gang brush plate for cable entry through walls etc. Suitable for pre terminated cables going to LCD or plasma screens, and particularly suited to HDMI cables as they can't be split, spliced or field-terminated. An ideal solution if you only have a short cable run.

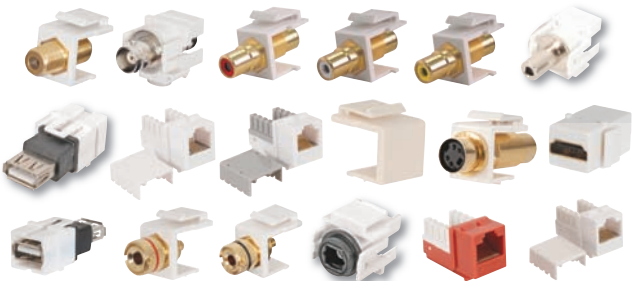


Cat.	Qty 1+	Qty 5+	Qty 10+
PS-0291	\$9.95	\$8.75	\$7.75

MULTIMEDIA WALLPLATE INSERTS

INSERTS FOR KEYSTONE WALLPLATES

A range of inserts to cater for computer and Audio video applications. They fit standard 110 keystone wall plates and allow you to configure your installation any way you like.



↑	Insert Type	Cat.	Qty 1+	Qty 5+	Qty 10+
	F81 - F81 - White	PS-0761	\$2.95	\$2.60	\$2.30
	BNC - BNC - White	PS-0763	\$2.95	\$2.60	\$2.30
	RCA - RCA Socket - White	PS-0764	\$2.95	\$2.60	\$2.30
	RCA - RCA - Red	PS-0765	\$2.95	\$2.60	\$2.30
	RCA - RCA - Yellow	PS-0767	\$2.95	\$2.60	\$2.30
	S-Video - S-Video	PS-0769	\$3.95	\$3.45	\$3.15
	3.5mm Socket	PS-0777	\$2.95	\$2.60	\$2.30
	4mm Banana - Banana - Red	PS-0774	\$2.95	\$2.60	\$2.30
	4mm Banana - Banana - Black	PS-0775	\$2.95	\$2.60	\$2.30
	TOSLINK - TOSLINK	PS-0749	\$3.95	\$3.45	\$3.15
	RJ11 Socket - 6P4C	YN-8026	\$4.95	\$4.45	\$3.90
	RJ12 Socket	YN-8027	\$4.95	\$4.45	\$3.90
	RJ45 Socket - Cat5e	YN-8028	\$4.95	\$4.45	\$3.90
	RJ45 Socket - Cat6	YN-8029	\$4.95	\$4.45	\$3.90
	HDMI - HDMI - White	PS-0771	\$9.95	\$8.75	\$7.75
	HDMI - HDMI Right Angle	PS-0796	\$9.95	\$8.75	\$7.75
	HDMI - HDMI with Flylead	PS-0797	\$12.95	\$11.35	\$10.35
	USB - USB - Right Angle	PS-0795	\$5.50	\$4.90	\$4.30
	USB - USB - White	PS-0773	\$4.95	\$4.45	\$3.90
	USB B - USB A Socket	PS-0753	\$4.95	\$4.45	\$3.90
	USB 3.0 - USB 3.0 - White	PS-0799	\$12.95	\$11.35	\$10.35

MULTIMEDIA WALLPLATES

MULTIMEDIA WALLPLATES

Give your media station or projector installation a neat finish with these handy multimedia wallplates. Available with a variety of video, audio, and data terminals to suit analogue and digital systems, all connections are double-sided for easy installation. Simply run a pre-made cable within the wall cavity or cabinet and plug it into the back of the wallplate.

- Standard GPO mount wallplate with concealed screws
- Plate dimensions 116(H) x 75(W) x 12(D)mm
- Approximate cavity depth required 60mm
- 150mm flylead behind plate on USB and HDMI connections

VGA, PC AUDIO, & COMPOSITE AUDIO & VIDEO

- VGA video
- Stereo 3.5mm audio
- RCA audio and video

PT-0471



HDMI, VGA, PC AUDIO & COMPOSITE VIDEO

- HDMI with flylead
- VGA video
- Stereo 3.5mm audio
- RCA composite video

PT-0475

PT-0477



VGA WITH PC AUDIO

- VGA video
- Stereo 3.5mm audio

PT-0477

HDMI 1.4 WALLPLATE WITH FLYLEAD

- VGA video
- Stereo 3.5mm audio

PS-0281

PT-0471

PT-0475

PS-0281

	Cat.	Qty 1+	Qty 5+	Qty 10+
VGA, PC Audio & Comp. Audio/Video	PT-0471	\$24.95	\$22.35	\$19.70
HDMI, VGA, PC Audio Comp. Video	PT-0475	\$29.95	\$26.90	\$23.70
VGA with PC Audio	PT-0477	\$19.95	\$17.70	\$15.70
HDMI 1.4	PS-0281	\$14.95	\$13.35	\$11.70

KEYSTONE WALLPLATES

Flush type wall plates to accept our standard keystone 110 jacks. Fits standard Australian electrical switch plate installation hardware and screw centres, making it perfect for easy flush installation on plasterboard or other cavity walls.

- Supplied unloaded without keystone jacks
- Dimensions 70(W) x 114(H) x 6(D)mm



	Cat.	Qty 1+	Qty 5+	Qty 10+
Single White	YN-8050	\$2.50	\$2.21	\$1.95
Double White	YN-8052	\$2.50	\$2.21	\$1.95
Triple White	YN-8054	\$2.75	\$2.45	\$2.15
Quad White	YN-8056	\$2.90	\$2.60	\$2.30
6 Way White	YN-8058	\$2.90	\$2.60	\$2.30

DISPLAYPORT WALLPLATE SOCKET WITH 3 KEYSTONE PORTS

Standard GPO sized wallplate for creating a neat DisplayPort connection for lecture theatres or meeting rooms. The DisplayPort standard is finding its way into more devices and offers various advantages over HDMI including better cable retention compared to HDMI (the plug stays plugged in!). It also gives higher bandwidth, longer cabling runs, and more.



Cat.	Qty 1+	Qty 5+	Qty 10+
YN-8055	\$14.95	\$13.35	\$11.70

DVI WALLPLATE SOCKET WITH 4 KEYSTONE PORTS

Features a DVI socket to socket joined to the wallplate with standard D-sub screws as well as 4 keystone ports. Gives you flexibility to expand your wallplate with a combination of other required sockets.

- Dimensions: 115(L) x 70(W)mm



Cat.	Qty 1+	Qty 5+	Qty 10+
YN-8057	\$12.95	\$11.35	\$10.35

VGA WALLPLATE SOCKET WITH 4 KEYSTONE PORTS

VGA Wall Plate Socket with 4 Keystone Ports



Cat.	Qty 1+	Qty 5+	Qty 10+
YN-8059	\$9.95	\$8.75	\$7.75

AUDIO CONVERTERS

COAXIAL TO TOSLINK DIGITAL AUDIO CONVERTER

Achieve compatibility between devices which have different digital audio inputs and outputs. Allows you to connect a DVD Player, video game console or sound card with a coaxial digital output to a home theatre receiver or digital recorder that only has TOSLINK optical input or vice-versa depending on which models you buy. For longer cable runs, you can input power to avoid signal loss and degradation.

Specifications	AC-1599
Coaxial Digital Input	via RCA jack
Optical Digital Output	via TOSLINK
Sample Rates	44.1kHz / 48kHz / 96kHz / 192kHz
Weight	approx. 33 grams
Power Supply	DC 6V / 250mA
Dimensions	72(W) x 48(L) x 23(H)mm



⬆	Cat.	Qty 1+	Qty 4+	Qty 10+
Coaxial to TOSLINK	AC-1599	\$34.95	\$31.45	\$27.90

ANALOGUE TO DIGITAL AUDIO CONVERTER

Accepts stereo audio input from 2 x RCA (red/white) leads and outputs to a high quality noise free digital format for connection to a modern sound system. It outputs to S/PDIF TOSLINK optical and S/PDIF RCA coaxial, both of these can be used simultaneously. Audio sample rates can be switched manually between 48kHz and 192kHz and the unit supports industry standard uncompressed 2-channel LPCM digital audio signal output. Perfect for connecting devices that lack digital audio to speaker systems which only accept digital audio.

- Supports industry standard uncompressed 2-channel LPCM digital audio signal output



Specifications	AC-1596
Input	Stereo line in (dual RCA jacks)
Output	S/PDIF TOSLINK optical & S/PDIF RCA coaxial
Supported sample rate	48kHz/192kHz
Power supply	6VDC included
Dimensions	80(L) x 70(W) x 27(H)mm

HDMI STEREO AUDIO INSERTER

This unit accepts either an analogue RCA line input or a digital Toslink audio input and combines it to the high definition HDMI signal. Supports stereo or surround sound audio signals, making it ideal for video editing applications, shop and commercial displays or an addition to your home cinema.

- Supports 3D signal
- Compliant with HDMI 1.3, HDCP 1.2 and DVI 1.0
- Supports HDMI sample rates up to 192kHz
- Supports Optical sample rates up to 48kHz
- HDMI Audio Format: PCM2/5.1/7.1, Dolby 5.1, DTS 5.1, DD+, D-TrueHD, DTS-HD
- Optical Audio Format: PCM2, Dolby Digital, DTS Digital audio 5.1
- Dimensions: 90.7(W) x 85.8(D) x 34(H)mm



↑	Cat.	Qty 1+
With Audio In	AC-1636	\$49.95

AC3 & DTS DIGITAL TO ANALOGUE AUDIO CONVERTER

For audio enthusiasts who demand the highest level of conversion when connecting digital audio sources to analogue speaker systems. This converter will accept input via RCA coaxial, 2 x SPDIF, or 3.5mm stereo audio and output any of them to 5.1 channel analogue (6 x RCA). This will allow you to translate your surround sound digital source to an older speaker system with minimal fuss. Perfect for game consoles such as the XBOX360, Playstation 3, Blu-Ray players and more.



- 24-bit Audio DSP
- 96kHz Digital Receivers and 192kHz/24-bit AND and DAC
- Supports Dolby Digital AC-3 Dolby Pro-logic, DTS, PCM and other digital audio formats
- Multi channel audio Input: 2 x SPDIF, 1 x RCA Coaxial, 1 x 3.5mm stereo
- Outputs: 5.1 Channel Analogue (6 x RCA) or stereo
- Dimensions: 108(L) x 75(W) x 27(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1634	\$99.95	\$89.95	\$79.95

AC3/DTS DIGITAL AUDIO TO ANALOGUE CONVERTER

Convert digital audio sources that use Dolby Digital AC3 Pro logic, DTS, PCM or other formats into 2.0 channel analogue audio output. This converter will accept input via TOSLINK/SPDIF or 1 x coaxial and output to 2 x RCA (L/R) and 3.5mm 2 channel analogue. A convenient turnkey solution for audio connectivity differences.

Specifications	AC-1658
Input	1 x TOSLINK/SPDIF, 1 x Coaxial
Output	2 x RCA (L/R), 1 x 3.5mm AUX
SNR	120dB
Degree of separation	85dB
Frequency response	20Hz - 20kHz
Dimensions	72(D) x 55(W) x 20(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1658	\$99.95	\$89.95	\$79.95

HIGH DEFINITION AUDIO DIGITAL-TO-ANALOGUE CONVERTER

A compact converter that takes a toslink optical, SPDIF coaxial and converts it to standard analogue left and right stereo audio. Allows for digital audio devices to be interfaced to analogue components such as a power amplifier, receivers, powered speakers or headphones via standard RCA line level output.

- Bridge legacy sound system with digital sources
- Support up to 24bit / 192kHz via toslink optical and SPDIF coaxial interface

Note: This DAC accepts 2 channel digital audio only and works with any PCM stream with Dolby Digital or DTS disabled

Specifications	AC-1631
Inputs	Toslink optical / SPDIF coaxial
Outputs	left and right stereo audio RCA
Bit Rate	16-24 bits
Sample Rate	32kHz / 44.1kHz / 48 kHz / 96kHz / 192kHz
Power supply	6VDC 250mA (included)
Dimensions	80(W) x 69(D) x 27(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1631	\$64.95	\$58.50	\$51.95

LET'S FIND EVERYTHING YOU NEED!

FROM
\$15.95
WQ-7301



TOSLINK CABLE

P415

FROM
\$6.95
WA-7062



RCA CABLE

P412

FROM
\$7.95
AA-2016



HEADPHONES

P381

FROM
\$39.95
AA-0472



STEREO AMP

P385

AUDIO SIGNAL CONVERTERS

AUDIO CONVERTERS (CONTINUED)

HIGH DEFINITION AUDIO DIGITAL-TO-ANALOGUE CONVERTER WITH USB INTERFACE & HEADPHONE JACK

The converter takes a toslink optical, SPDIF coaxial or USB digital audio source and converts it to standard analogue left and right stereo audio. Allows for digital audio devices to be interfaced to analogue components such as a power amplifier, receivers, powered speakers or headphones via standard RCA line level output. It has a built in OP amp with adjustable volume control for personal listening through earphones or headphones.

- Built-in OP amp with adjustable level control
- Bridge legacy sound system with digital sources
- Support up to 24bit / 192kHz via to slink optical and SPDIF coaxial and USB interface
- Plug and play with Windows 7, Windows XP and Windows Vista
- Requires no additional drivers or software

Specifications	AC-1633
Inputs	USB / to slink optical / SPDIF coaxial (Switchable)
Outputs	left and right stereo audio RCA and 3.5mm stereo headphone jack (Built-in OP headphone amplifier)
Bit Rate	16-bit to 24-bit
Sample Rate	32kHz / 44.1kHz / 48 kHz / 96kHz / 192kHz (via toslink/optical) 32kHz / 44.1kHz / 48 kHz / 96kHz (via USB)
Power supply	5VDC 1A (included)
Dimensions	111(W) x 105(D) x 30(H)mm

Note: This DAC accepts 2 channel digital audio only, and works with any PCM stream with Dolby Digital or DTS disabled.

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1633	\$99.95	\$89.95	\$79.95

AUDIO SWITCHES

3 WAY AUDIO SELECTOR

Many audio amplifiers don't provide enough inputs for all your components. Solve that problem easily with this 3-way audio switcher. It takes up to three stereo RCA inputs and provides a single stereo RCA output. Easy-to-use pushbutton front panel.

- 3 stereo pairs of RCA inputs
- Dimensions:
133(W) x 42(H) x 85(D)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1655	\$15.95	\$14.35	\$12.70

BATTERY OPERATED PHONO PRE-AMP

A simple 9V battery powered preamp. Used for connecting products with magnetic pick-ups such as turntables to an amplifier. 2 RCA inputs and 2 RCA out. 1 x 9V battery required.

Specifications	AC-1649
Rated input level	3mV
Max input level	38mV
Input Impedance	50K ohms at 1,000Hz
Output Level	1.8VRMS
Output Impedance	50K ohms
S/N ratio	50dB
Dimensions	72(W) x 91(L) x 28(D)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1649	\$24.95	\$22.35	\$19.70

4 WAY OPTICAL SWITCH BOX WITH 1M CABLE

Connect up to 4 digital optical home or portable audio components such as LCD, Blu-ray player, DVD player, satellite receiver, cable set top box, or gaming systems to your home theatre to your home theatre system. This selector allows you to switch from one component to another just by turning the selector dial - no more disconnecting and connecting cables or moving equipment around. Play any of the 4 components you connect and enjoy the output through your home theatre system or digital surround headphone system.

- Dimensions: 160(L) x 150(W) x 44(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1597	\$34.95	\$31.45	\$27.90

TURNTABLE PREAMP SWITCH BOX

Many modern amplifiers do not have a phono input for a turntable. This preamplifier/switch box fixes that problem and also provides two selectable inputs to a stereo line level output which feeds into the auxilliary input on your stereo amplifier.

- RIAA compensation
- Requires 12VDC mains adaptor

Specifications	AC-1662
Input sensitivity	2.5mV
Input impedance	47k Ohm
Output	180mV
Current draw	10mA
Output impedance	47kOhm
Size	160(L) x 100(D) x 40(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1662	\$24.95	\$22.35	\$19.70

ISOLATOR

GROUND LOOP ISOLATOR (STEREO) RCA

Used to eliminate ground loop problems (usually manifested as a low frequency hum) in audio connections. Earthing brown ground wires sometimes helps even more. Secured to a solid object with cable ties. Very neat!

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-3084	\$9.95	\$8.75	\$7.75

SCART

SCART

Carries stereo audio, composite video, S-video & RGB. Used to carry signals from AV source to your TV and also allow recording to other sources, for example video recorders. Originated in Europe.

	PP-0580	PA-3667	PA-3659	PA-3650
Type	21 Pin Plug	SCART Plug to RGB Adaptor	SCART Plug to 3 RCA & S-Video Sockets	SCART Adaptor
Cat.	PP-0580	PA-3667	PA-3659	PA-3650
Qty 1+	\$0.95	\$4.95	\$14.95	\$2.95
Qty 10+			\$13.35	\$2.60
Qty 50+			\$11.70	\$2.30

LET'S FIND EVERYTHING YOU NEED!

FROM
\$12.95
AC-1650



AV SWITCHES

P417

FROM
\$5.95
WA-7050



AUDIO LEADS

P412

FROM
\$69.95
AM-4222



MICROPHONE MIXER

P369

FROM
\$7.95
AA-2016



HEADPHONES

P381

AUDIO LEAD SELECTION GUIDE

Use	Quality	Connector	to	Connector	Length	Cat.	Page
Audio	Best	Stereo 3.5 Plug	RCA x 2	Plug	1.5m	WQ-7206	414
Audio	Best	Stereo 3.5 Plug	RCA x 2	Plug	3.0m	WQ-7208	414
Video	Best	RCA x 2 Plug	RCA x 2	Plug	0.5m	WQ-7227	414
Audio	Best	RCA x 2 Plug	RCA x 2	Plug	1.5m	WQ-7226	414
Audio	Best	RCA x 2 Plug	RCA x 2	Plug	3.0m	WQ-7228	414
Audio	Best	RCA x 2 Plug	RCA x 2	Plug	5.0m	WQ-7230	414
Audio	Best	RCA x 2 Plug	RCA x 2	Plug	10.0m	WQ-7232	414
Audio	Best	XLR 3 PIN Plug	XLR 3 PIN	Socket	2.0m	WA-7041	412
Audio	Best	XLR 3 PIN Plug	XLR 3 PIN	Socket	6.0m	WA-7042	412
Audio	Best	XLR 3 PIN Plug	XLR 3 PIN	Socket	10.0m	WA-7043	412
Audio	Good	5 Pin DIN Plug	5 Pin DIN	Plug	1.5m	WA-7000	411
Audio	Good	Stereo 2.5 Plug	Stereo 3.5	Plug	1.5m	WA-7004	411
Audio	Good	Mono 3.5 Plug	Mono 3.5	Plug	1.5m	WA-7006	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Plug	0.5m	WA-7007	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Plug	1.5m	WA-7008	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Plug	3.0m	WA-7009	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Plug	5.0m	WA-7005	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Plug	2.0m Slim	WA-7500	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Socket	3.0m	WA-7010	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Socket	3.0m Curly	WA-7012	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Socket	5.0m	WA-7011	411
Audio	Good	Stereo 3.5 Plug	RCA x 2	Plug	1.5m	WA-7014	411
Audio	Good	Stereo 3.5 Plug	RCA x 2	Plug	3.0m	WA-7015	411
Audio	Good	Stereo 3.5 Plug	RCA x 2	Plug	5.0m	WA-7017	411
Audio	Good	Stereo 3.5 Plug	RCA x 2	Plug	2.0m Slim	WA-7502	411
Audio	Good	Stereo 3.5 Plug	RCA x 2	Socket	300mm	WA-7016	411
Audio	Good	Stereo 3.5 Plug	Stereo 3.5	Socket	0.2m Slim	WA-7504	411

Use	Quality	Connector	to	Connector	Length	Cat.	Page
Audio	Good	Mono 6.5 Plug	Mono 6.5	R/A Plug	3.0m	WA-7024	412
Audio	Good	Mono 6.5 Plug	Mono 6.5	R/A Plug	6.0m Curly	WA-7026	412
Audio	Good	Mono 6.5 Plug	Mono 6.5	Socket	5.0m	WA-7030	412
Audio	Good	Mono 6.5 Plug	XLR 3 Pin	Socket	6.0m	WA-7040	412
Audio	Good	Stereo 6.5 Plug	Stereo 6.5	Socket	6.0m Curly	WA-7046	412
Audio	Good	RCA Plug	RCA	Plug	1.5m	WA-7050	412
Audio	Good	RCA Plug	RCA x 2	Plug	1.5m	WA-7054	412
Audio	Good	RCA Plug	RCA x 2	Socket	300mm	WA-7056	412
Audio	Good	RCA x 2 Plug	RCA x 2	Plug	1.5m	WA-7062	412
Audio	Good	RCA x 2 Plug	RCA x 2	Plug	3.0m	WA-7064	412
Audio	Good	RCA x 2 Plug	RCA x 2	Plug	5.0m	WA-7066	412
Audio	Good	RCA x 2 Plug	RCA x 2	Plug	10.0m	WA-7068	412
Audio	Good	RCA x 2 Plug	RCA x 2	Socket	1.5m	WA-7070	412
Audio	Good	RCA x 2 Plug	RCA x 2	Socket	3.0m	WA-7072	412
Audio	Good	RCA x 2 Plug	RCA x 2	Socket	5.0m	WA-7074	412
Audio	Good	RCA x 4 Plug	RCA x 4	Plug	1.5m	WA-7078	412
Audio	Good	RCA x 4 Plug	RCA x 4	Plug	5.0m	WA-7080	412
Audio	Good	RCA Plug	RCA	Socket	3.0m	WA-7084	412
Audio	Good	RCA Plug	Mono 3.5	Plug	1.5m	WA-7088	412
Audio	Good	RCA x 2 Piggyback	RCA x 2	Plug	1.5m	WA-7090	412
Audio	Good	RCA x 2 Piggyback	RCA x 2	Plug	3.0m	WA-7091	412
Audio	Good	RCA Socket	RCA x 2	Plug	300mm	WA-7058	412
Audio	Good	Speakon Plug	Speakon	Plug	5m	WA-7100	412
Audio	Good	Speakon Plug	Speakon	Plug	10m	WA-7102	412
Audio	Good	Speakon Plug	Speakon	Plug	20m	WA-7106	412
Audio	Good	XLR Plug	XLR	Socket	6.0m	WQ-7292	412

AUDIO LEADS

Audio leads shown on this page are packaged in handy hanging storage blister display packs except where stated.

5 PIN DIN PLUG TO 5 PIN DIN PLUG



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7000	\$6.95	\$6.25	\$5.50

3.5mm MONO PLUG TO 3.5mm MONO PLUG



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7006	\$4.95	\$4.45	\$3.90

2.5mm STEREO PLUG TO 3.5mm STEREO PLUG

General purpose audio lead 2.5mm stereo plug - 3.5mm stereo plug. 1.5m long.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7004	\$4.95	\$4.45	\$3.90

3.5mm STEREO PLUG TO 3.5mm STEREO PLUG



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WA-7007	\$4.50	\$3.95	\$3.60
1.5m	WA-7008	\$4.95	\$4.45	\$3.90
3.0m	WA-7009	\$8.50	\$7.50	\$6.75
5.0m	WA-7005	\$9.95	\$8.75	\$7.75

SLIM 3.5MM STEREO LEADS

Slim design plugs ideal for use with Smartphones, MP3 players, and other small devices where bulky connectors are a hindrance.

SLIM 3.5MM STEREO PLUG TO 3.5MM STEREO PLUG LEAD - 2M



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	WA-7500	\$9.95	\$8.75	\$7.75

RETRACTABLE LEAD 3.5mm PLUG TO 3.5mm PLUG

Cable retracts for easy storage

- 1.0m long.



Length	Cat.	Qty 1+	Qty 3+	Qty 6+
1.0m	WC-7732	\$14.95	\$13.35	\$11.70

3.5mm STEREO PLUG TO 3.5mm STEREO SOCKET



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
3.0m	WA-7010	\$6.95	\$6.25	\$5.50
Curly 3.0m	WA-7012	\$8.50	\$7.50	\$6.75
5.0m	WA-7011	\$9.95	\$8.75	\$7.75

SLIM 3.5MM STEREO PLUG TO 2 X 3.5MM STEREO SOCKET

- 200mm long



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.2m	WA-7504	\$9.95	\$8.75	\$7.75

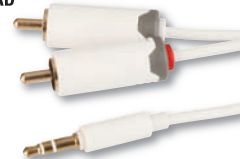
3.5mm STEREO PLUG TO 2 X RCA PLUGS



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7014	\$6.50	\$5.75	\$4.95
3.0m	WA-7015	\$8.95	\$7.95	\$6.95
5.0m	WA-7017	\$9.95	\$8.75	\$7.75

SLIM 3.5MM STEREO PLUG TO 2 X RCA PLUG LEAD

- 2.0m long



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	WA-7502	\$12.95	\$11.35	\$10.35

3.5mm STEREO PLUG TO 2 X RCA SOCKETS

- 300mm long



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
300mm	WA-7016	\$5.50	\$4.90	\$4.30

3.5mm STEREO SOCKET TO 2 X RCA PLUGS

- 300mm long



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
300mm	WA-7018	\$5.50	\$4.90	\$4.30

AUDIO LEADS

AUDIO LEADS (CONTINUED)

6.5mm MONO PLUG TO
6.5mm MONO R/A PLUG



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
3.0m	WA-7024	\$6.95	\$6.25	\$5.50

6.5mm MONO PLUG
TO 6.5mm MONO
SOCKET



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5.0m	WA-7030	\$8.95	\$7.95	\$6.95

6.5mm MONO PLUG
TO 3 PIN XLR
SOCKET



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
6.0m	WA-7040	\$19.95	\$17.70	\$15.70

3 PIN XLR TYPE PLUG TO
3 PIN XLR SOCKET



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	WA-7041	\$11.95	\$10.70	\$9.50
6.0m	WA-7042	\$19.95	\$17.70	\$15.70
10.0m	WA-7043	\$24.95	\$22.35	\$19.70

RCA PLUG
TO RCA PLUG



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7050	\$5.95	\$5.25	\$4.75

RCA PLUG TO 2 X
RCA PLUGS



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7054	\$5.95	\$5.25	\$4.75

2 X RCA PLUGS TO 2 X
RCA SOCKETS



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7070	\$6.50	\$5.75	\$4.95
3.0m	WA-7072	\$9.50	\$8.50	\$7.50
5.0m	WA-7074	\$11.95	\$10.70	\$9.50

RCA PLUG TO 2 X
RCA SOCKETS



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
300mm	WA-7056	\$4.95	\$4.45	\$3.90

1 X RCA SOCKET TO 2
X RCA PLUGS



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
300mm	WA-7058	\$4.95	\$4.45	\$3.90

2 X RCA PLUGS
TO 2 X RCA PLUGS



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7062	\$6.95	\$6.25	\$5.50
3.0m	WA-7064	\$8.95	\$7.95	\$6.95
5.0m	WA-7066	\$10.95	\$9.75	\$8.75
10.0m	WA-7068	\$13.95	\$12.35	\$10.95

PIGGYBACK 2 X RCA TO RCA LEAD

Piggyback 2 x RCA to RCA audio lead 1.5m



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7090	\$9.50	\$8.50	\$7.50
3.0m	WA-7091	\$11.95	\$10.70	\$9.50

RCA PLUG TO RCA
SOCKET



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
3.0m	WA-7084	\$6.50	\$5.75	\$4.95

RCA PLUG TO 3.5mm
MONO PLUG



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7088	\$4.95	\$4.45	\$3.90

4 X RCA PLUGS TO 4 X RCA PLUGS



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WA-7078	\$8.50	\$7.50	\$6.75
5.0m	WA-7080	\$14.95	\$13.35	\$11.70

SPEAKON AUDIO LEADS

Speakon connectors are the standard for speaker connections in PA and sound reinforcement applications, and if you're building or installing a system they're the only way to go. You could buy the cable and connectors and put them together, or buy these excellent ready-made cables.



NEW
LOW
PRICE

↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5.0m	WA-7100	\$24.95	\$22.35	\$19.70
10.0m	WA-7102	\$44.95	\$40.45	\$35.90
20.0m	WA-7106	\$69.95		

SPEAKON LEAD SPLITTER 2 WAY

An adaptor that will split your stereo 4 core Speakon cable run to 2 x 2 pole left and right channels. A solution that cuts down on cable runs and costs dramatically.

- 1 x 4 pole Speakon plug to 2 x 2 pole Speakon plugs.
- Length 300mm.



NEW
LOW
PRICE

↑ Length	Cat.	Qty 1+
300mm	WA-7109	\$14.95

6.5MM MONO TO SPEAKON CABLE - 3M

Stage quality 6.5mm mono to Speakon cable for connecting small PA systems. 3m, super flexi cable.



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
3.0m	WA-7108	\$16.95	\$14.95	\$13.35

SPEAKON LEAD
EXTENDER

Connects Speakon leads together to extend cable runs as far as you need to. ABS construction.



Cat.	Qty 1+	Qty 4+	Qty 10+
PA-3689	\$12.95	\$11.35	\$10.35

INSTRUMENT LEADS

CURLY INSTRUMENT
EXTENSION LEAD 6.5
STEREO PLUG TO 6.5
STEREO SOCKET 6M



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
6.0m	WA-7046	\$9.95	\$8.75	\$7.75

CURLY INSTRUMENT LEAD
6.5 MONO PLUG TO 6.5
MONO PLUG 6M

Suitable for all musical instrument applications. Extends to 6 metres.



↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
6.0m	WA-7026	\$11.95	\$10.70	\$9.50

AMPHENOL INSTRUMENT CABLE 6 METRE

Suitable for guitar, bass or keyboard applications. Terminated with pro quality strain-relieved Amphenol 6.5mm plugs, 180 degree one end, right angle on the other.

- Gold plated.



Amphenol

↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
6.0m	WQ-7290	\$34.95	\$31.45	\$27.90

AMPHENOL BALANCED MICROPHONE CABLE

Professional quality mic cable terminated with strain-relieved Amphenol connectors.

- XLR male to XLR female.



Amphenol

↑ Length	Cat.	Qty 1+	Qty 4+	Qty 10+
6.0m	WQ-7292	\$44.95	\$40.45	\$35.90

VIDEO LEAD SELECTION GUIDE

Use	Quality	Connector	to	Connector	Length	Cat.	Page
Video	Best	Coaxial Plug	Coaxial Plug	Coaxial Plug	1.5m	WQ-7200	414
Video	Best	Coaxial Plug	Coaxial Plug	Coaxial Plug	1.5m	WQ-7202	414
Video	Best	S-Video Plug	S-Video Plug	S-Video Plug	1.5m	WQ-7214	414
Video	Best	S-Video Plug	S-Video Plug	S-Video Plug	3.0m	WQ-7216	414
Video	Best	S-Video Plug	S-Video Plug	S-Video Plug	5.0m	WQ-7217	414
Video	Best	S-Video Plug	S-Video Plug	S-Video Plug	10.0m	WQ-7220	414
Video	Best	RCA Plug	RCA Plug	RCA Plug	0.5m	WQ-7221	414
Video	Best	RCA Plug	RCA Plug	RCA Plug	1.5m	WQ-7222	414
Video	Best	RCA Plug	RCA Plug	RCA Plug	3.0m	WQ-7223	414
Video	Best	RCA Plug	RCA Plug	RCA Plug	5.0m	WQ-7224	414
Video	Best	RCA Plug	RCA Plug	RCA Plug	10.0m	WQ-7225	414
Video	Best	RCA x 3 Plug	RCA x 3 Plug	RCA x 3 Plug	0.5m	WQ-7239	414
Video	Best	RCA x 3 Plug	RCA x 3 Plug	RCA x 3 Plug	1.5m	WQ-7238	414
Video	Best	RCA x 3 Plug	RCA x 3 Plug	RCA x 3 Plug	3.0m	WQ-7240	414
Video	Best	RCA x 3 Plug	RCA x 3 Plug	RCA x 3 Plug	5.0m	WQ-7250	414
Video	Best	D15HD Plug	D15HD Plug	D15HD Plug	0.5m	WC-7585	506
Video	Best	D15HD Plug	D15HD Plug	D15HD Plug	2.0m	WC-7586	506
Video	Best	D15HD Plug	D15HD Plug	D15HD Plug	5.0m	WC-7588	506
Video	Best	D15HD Plug	D15HD Plug	D15HD Plug	10.0m	WQ-7258	506
Video	Best	D15HD Plug	D15HD Plug	D15HD Plug	15.0m	WQ-7257	506
Video	Best	D15HD Plug	RCA x 3 Plug	RCA x 3 Plug	1.5m	WQ-7259	414
Video	Bargain	HDMI Plug	HDMI Plug	HDMI Plug	1.5m	WV-7914	424
Video	Good	HDMI Plug	HDMI Plug	HDMI Plug	1.5m	WV-7915	424
Video	Good	HDMI Plug	HDMI Plug	HDMI Plug	3.0m	WV-7916	424
Video	Good	HDMI Plug	HDMI Plug	HDMI Plug	5.0m	WV-7917	424
Video	Best	HDMI Plug	HDMI Plug	HDMI Plug	0.5m	WQ-7906	424
Video	Best	HDMI Plug	HDMI Plug	HDMI Plug	1.5m	WQ-7900	424
Video	Best	HDMI Plug	HDMI Plug	HDMI Plug	3.0m	WQ-7902	424
Video	Best	HDMI Plug	HDMI Plug	HDMI Plug	5.0m	WQ-7904	424
Video	Best	HDMI Plug	HDMI Plug	HDMI Plug	10.0m	WQ-7905	424
Video	Best	HDMI (amp) Plug	HDMI (amp) Plug	HDMI (amp) Plug	10.0m	WQ-7430	424
Video	Best	HDMI (amp) Plug	HDMI (amp) Plug	HDMI (amp) Plug	15.0m	WQ-7432	424
Video	Best	HDMI (amp) Plug	HDMI (amp) Plug	HDMI (amp) Plug	20.0m	WQ-7434	424

VIDEO LEADS

3 X RCA PLUGS TO 3 X RCA PLUGS
Low capacitance AV connecting cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7316	\$8.95	\$7.95	\$6.95
3.0m	WV-7318	\$12.50	\$10.95	\$9.95
5.0m	WV-7320	\$14.95	\$13.35	\$11.70
10.0m	WV-7321	\$24.95	\$22.35	\$19.70

3.5mm 4 CONTACT PLUG TO 3 X RCA PLUGS



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7345	\$11.95	\$10.70	\$9.50

S-VIDEO 4 PIN MINI DIN PLUG TO S-VIDEO 4 PIN MINI DIN PLUG



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7330	\$9.95	\$8.75	\$7.75
3.0m	WV-7332	\$12.95	\$11.35	\$10.35
5.0m	WV-7334	\$14.95	\$13.35	\$11.70
10.0m	WV-7336	\$24.95	\$22.35	\$19.70

SCART PLUG TO 6 X RCA PLUGS
6 core SCART AV connecting cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7342	\$11.95	\$10.70	\$9.50

3 RCA PIGGYBACK PLUGS TO 3 X RCA PLUGS

With these leads, you can connect 2 outputs from one set of RCA sockets. A lot cheaper than buying double adaptors.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7324	\$13.95	\$12.35	\$10.95
3.0m	WV-7325	\$15.95	\$14.35	\$12.70
5.0m	WV-7326	\$19.95	\$17.70	\$15.70

BNC PLUG TO BNC PLUG
RG-59U coaxial cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7300	\$9.50	\$8.50	\$7.50

RCA PLUG TO RCA PLUG
RG-59U coaxial cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7304	\$6.95	\$6.25	\$5.50
3.0m	WV-7306	\$7.95	\$6.95	\$6.25

RCA PLUG TO BNC PLUG
RG-59U coaxial cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7308	\$7.95	\$6.95	\$6.25

F PLUG TO F PLUG
RG-59U coaxial cable
White version - WV-7366



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7386	\$8.95	\$7.95	\$6.95
1.5m	WV-7366	\$8.95	\$7.95	\$7.15

F PLUG TO TV COAXIAL PLUG

RG-59U coaxial cable
White version - WV-7365



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7384	\$4.95	\$4.45	\$3.90
1.5m	WV-7365	\$4.95	\$4.45	\$4.00
5.0m	WV-7385	\$9.95	\$8.75	\$7.75

FLEXIBLE COAX LEADS

A new range of super flexible coax leads with multi-stranded core and a flexible outer casing that is less likely to tangle and prevents kinking. Its flexibility makes it easier to run through entertainment cabinets and along skirting boards, etc. Available in RG59 or RG6 quad shielded coax cable with nickel plated, moulded F59 plugs. Blue in colour.

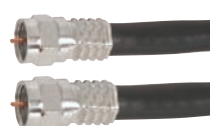
NEW 2015



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
RG-59				
10m	WV-7450	\$19.95	\$17.95	\$15.70
20m	WV-7452	\$29.95	\$26.95	\$23.70
RG6 Quad Shielded				
10m	WV-7454	\$29.95	\$26.95	\$23.70
20m	WV-7456	\$39.95	\$35.90	\$31.90

HIGH QUALITY F PLUG TO F PLUG

RG-6 Quad screened, hex crimp coaxial cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7390	\$7.95	\$7.10	\$6.25
3.0m	WV-7392	\$10.95	\$9.75	\$8.75
5.0m	WV-7394	\$14.95	\$13.35	\$11.70
10.0m	WV-7396	\$24.95	\$22.35	\$19.70

AV LEADS - PREMIUM QUALITY

HIGH QUALITY AV LEADS

A premium range of audio video cables at the right price. These are high performance non-migration interconnection cables utilising 99.96% pure OFC.

- 24 carat hard gold plated contacts
- 100% shielded metal bodied plugs with positive finger grip & moulded cable strain relief.
- Video cable covered in soft & flexible matt or matte blue jacket
- Recommended for digital or analogue signals
- For home theatre systems, Hi-Fi systems, video/camcorder/TV/VCR/editing suites, DVD, satellite and any application which deserves the absolute best in AV performance
- Clean and clear image reproduction
- Attractively packaged
- Will stand up to the quality of units that sell up to 4-5 times more elsewhere (apart from the expensive packaging!)

CONCORD

AV LEAD SELECTION GUIDE

Use	Quality	Connector to	Connector	Length	Cat.	Page
AV	Best	RCA x 3	Plug	RCA x 3	Plug	1.5m WQ-7234 414
AV	Best	RCA x 3	Plug	RCA x 3	Plug	3.0m WQ-7236 414
AV	Best	RCA x 3	Plug	RCA x 3	Plug	5.0m WQ-7237 414
AV	Best	RCA x 3	Plug	RCA x 3	Plug	10.0m WQ-7235 414
AV	Good	RCA x 3	Plug	RCA x 3	Plug	1.5m WV-7316 413
AV	Good	RCA x 3	Plug	RCA x 3	Plug	3.0m WV-7318 413
AV	Good	RCA x 3	Plug	RCA x 3	Plug	5.0m WV-7320 413
AV	Good	RCA x 3	Plug	RCA x 3	Plug	10.0m WV-7321 413
AV	Good	Scart	Plug	RCA x 6	Plug	1.5m WV-7342 413
AV	Good	3.5 (4 pole)	Plug	RCA x 3	Plug	1.5m WV-7345 413
AV	Good	3.5 (4 pole)	Plug	3.5 (4 pole)	Plug	2m WV-7347 415
AV	Good	3.5 (4 pole)	Plug	3.5 (4 pole)	Socket	2m WV-7349 415
AV	Good	3.5 (4 pole)	Plug	3.5 x 2	Socket	300mm WA-7020 415 NEW
AV	Good	RCA x 3	Piggyback	RCA x 3	Plug	1.5m WV-7324 413
AV	Good	RCA x 3	Piggyback	RCA x 3	Plug	3.0m WV-7325 413
AV	Good	RCA x 3	Piggyback	RCA x 3	Plug	5.0m WV-7326 413

3.5mm STEREO PLUG TO 2 X RCA PLUGS

Stereo parallel cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7206	\$17.95	\$15.95	\$14.35
3.0m	WQ-7208	\$18.95	\$16.95	\$14.95

RCA PLUG TO RCA PLUG

Video coaxial cable. RG594 75Ω.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WQ-7221	\$10.95	\$9.75	\$8.75
1.5m	WQ-7222	\$11.95	\$10.70	\$9.50
3.0m	WQ-7223	\$14.95	\$13.35	\$11.70
5.0m	WQ-7224	\$17.95	\$15.95	\$14.35
10.0m	WQ-7225	\$24.95	\$22.35	\$19.70

2 X RCA PLUGS TO 2 X RCA PLUGS

Stereo parallel cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WQ-7227	\$16.95	\$14.95	\$13.35
1.5m	WQ-7226	\$18.95	\$16.95	\$14.95
3.0m	WQ-7228	\$24.95	\$22.35	\$19.70
5.0m	WQ-7230	\$29.95	\$26.90	\$23.70
10.0m	WQ-7232	\$49.95	\$44.90	\$39.90

S-VIDEO 4 PIN MINI DIN PLUG TO PLUG

S-Video cable



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7214	\$18.95	\$16.95	\$14.95
3.0m	WQ-7216	\$22.95	\$20.35	\$18.35
5.0m	WQ-7217	\$27.95	\$24.95	\$22.35
10.0m	WQ-7220	\$34.95	\$31.45	\$27.90

75 OHM TV COAXIAL PLUG TO 75 OHM TV COAXIAL PLUG

RG59U coaxial cable.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7200	\$14.95	\$13.35	\$11.70

75 OHM TV COAXIAL PLUG TO 75 OHM TV COAXIAL SOCKET

RG59U coaxial cable.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7202	\$14.95	\$13.35	\$11.70

3 X RCA PLUGS TO 3 X RCA PLUGS

AV parallel cable. Coloured cable ID.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7234	\$34.95	\$31.45	\$27.90
3.0m	WQ-7236	\$44.95	\$40.45	\$35.90
5.0m	WQ-7237	\$49.95	\$44.90	\$39.90
10.0m	WQ-7235	\$59.95	\$53.95	\$47.90

WHAT'S SO GOOD ABOUT CONCORD LEADS?

CONCORD

Our range of Concord leads are premium quality cables with 24 karat gold plated metal connectors. They are made with pure oxygen free copper conductors and sealed moulded with PVC/ABS insulation for maximum durability. Excellent high grade cables for all your interconnect applications. Independently tested to outperform more expensive cables available in the market.

RGB COMPONENT VIDEO 3 X RCA PLUGS TO 3 X RCA PLUGS

AV parallel cable. Colour coded plugs.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WQ-7239	\$29.95	\$26.90	\$23.70
1.5m	WQ-7238	\$34.95	\$31.45	\$27.90
3.0m	WQ-7240	\$44.95	\$40.45	\$35.90
5.0m	WQ-7250	\$49.95	\$44.90	\$39.90

VGA D15HD PLUG TO 3 X RGB PLUGS

- D15HD male to 3 x RCA plug
- Superior electrical screening



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7259	\$32.95	\$29.45	\$26.45

ROADIES CABLE TESTER

Simply plug the cable under test and turn the rotary switch. The LED array gives you an instant go/no-go status of each conductor path in the cable. With bullet-proof all-metal construction, it's ideally suited to the ruff and tumble world of rock 'n' roll, but is also suitable for any technician working with cables. Faster and much easier than a multimeter. Requires 1 x 9V battery. (use SB-2423)

Tests the following cables:

- Speakon 4, 8P • 1/4" mono & TRS • DIN 3, 5, 7, 8P • XLR 3, 5P
- Phono (RCA) • USB • RJ45 • Dimensions: 190(L) x 98(W) x 35(H)mm



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-0405	\$59.95	\$53.95	\$47.90



AV LEADS

Use	Quality	Connector	to	Connector	Length	Cat.	Page
Audio	Best	TOSLINK Plug		TOSLINK Plug	1.0m	WQ-7301	415
Audio	Best	TOSLINK Plug		TOSLINK Plug	3.0m	WQ-7302	415
Audio	Best	TOSLINK Plug		TOSLINK Plug	5.0m	WQ-7303	415
Audio	Good	TOSLINK Plug		TOSLINK Plug	0.5m	WQ-7293	415
Audio	Good	TOSLINK Plug		TOSLINK Plug	1.0m	WQ-7294	415
Audio	Good	TOSLINK Plug		TOSLINK Plug	2.0m	WQ-7295	415
Audio	Good	TOSLINK Plug		TOSLINK Plug	5.0m	WQ-7297	415
Audio	Best	TOSLINK Plug		Optical 3.5 Plug	1.0m	WQ-7298	415
Audio	Best	TOSLINK Plug (INT)		Optical 3.5 Plug (INT)	2.0m	WQ-7299	415
Video	Best	DVI-D Plug		DVI-D Plug	2.0m	WC-7590	415, 506
Video	Best	DVI-D Plug		DVI-D Plug	5.0m	WC-7591	415
Video	Best	DVI-A Plug		D15HD Plug	2.0m	WC-7594	415, 506
Video	Good	Coaxial Plug		Coaxial Plug	1.5m	WV-7350	396
Video	Good	Coaxial Plug		Coaxial Plug	1.5m White	WV-7363	396
Video	Good	Coaxial Plug		Coaxial Plug	3.0m	WV-7351	396
Video	Good	Coaxial Plug		Coaxial Plug	5.0m	WV-7352	396
Video	Good	Coaxial Plug		Coaxial Plug	10.0m	WV-7354	396
Video	Good	Coaxial Plug		Coaxial Socket	1.5m	WV-7360	396
Video	Good	Coaxial Plug		Coaxial Socket	1.5m White	WV-7364	396
Video	Good	Coaxial Plug		Coaxial Socket	3.0m	WV-7361	396
Video	Good	Coaxial Plug		Coaxial Socket	5.0m	WV-7362	396
Video	Good	Coaxial Plug		Coaxial Socket	1.5m	WV-7367	396

AV LEADS (CONTINUED)

3.5MM 4 POLE PLUG TO 3.5MM 4 POLE AV LEADS - 2M

Also known as a TRRS plug, suitable for a number of applications, i.e. for A/V signal or Smartphone functions.

3.5MM 4 POLE PLUG TO 3.5MM 4 POLE PLUG AV LEAD - 2M

WV-7347



3.5MM 4 POLE PLUG TO 3.5MM 4 POLE SOCKET AV EXTENSION LEAD - 2M

WV-7349



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2m	WV-7349	\$9.95	\$8.75	\$7.75
2m	WV-7347	\$9.95	\$8.75	\$7.75

3.5MM 4 POLE PLUG TO 2 X 3.5MM SOCKET LEAD

Allows you to connect a separate microphone and stereo headphones or earphones to a Smartphone instead of using a combined earphone with built-in mic.

- Length: 300mm



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
300mm	WA-7020	\$6.95	\$6.25	\$5.50

EXTENSION LEAD - FME

FME LOW LOSS EXTENSION LEAD

- Length 5m



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5.0m	WC-7820	\$34.95	\$31.45	\$27.90

SMA LEADS

SMA COAXIAL LEADS - FACTORY PRECRIMPED

- SMA plug to plug
- Gold plated connectors
- RG316 high quality coax cable
- Bandwidth up to 2.9GHz



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7800	\$17.95	\$15.95	\$14.35
3.0m	WC-7802	\$29.95	\$26.90	\$23.70
5.0m	WC-7804	\$39.95	\$35.90	\$31.90

DVI CABLES

DVI-D TO DVI-D VIDEO CABLES

- DVI to DVI video cables
- Male to Male
- 24 pin



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7590	\$29.95	\$26.90	\$23.70
5.0m	WC-7591	\$44.95	\$40.45	\$35.90

DVI-A TO VGA VIDEO CABLE

- DVI to 15pin HD VGA



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7594	\$24.95	\$22.35	\$19.70

DVI & HDMI CABLES/ADAPTORS

DVI ADAPTOR

- Female to female
- Compatible with DVI-I single dual link, DVI-single/dual link & DVI-A male
- All pins wired straight through



Cat.	Qty 1+	Qty 4+	Qty 10+
PA-0896	\$14.95	\$13.35	\$11.70

OPTICAL ADAPTORS

TOSLINK ADAPTOR FEMALE / FEMALE

- Enables shorter optical leads to be extended



Cat.	Qty 1+	Qty 4+	Qty 10+
PA-3575	\$6.95	\$6.25	\$5.50

TOSLINK FEMALE TO OPTICAL 3.5mm MALE



Cat.	Qty 1+	Qty 4+	Qty 10+
PA-3574	\$5.95	\$5.25	\$4.75

FIBRE OPTIC LEADS

FIBRE OPTIC TOSLINK AUDIO LEAD

When a high quality, interference free audio signal is required use TOSLINK fibre optic cables. Suitable for home theatre audio setups.

- Supports Dolby Digital 5.1 surround sound and DTS



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WQ-7293	\$8.50	\$7.50	\$6.75
1.0m	WQ-7294	\$9.95	\$8.75	\$7.75
2.0m	WQ-7295	\$14.95	\$13.35	\$11.70
5.0m	WQ-7297	\$24.95	\$22.35	\$19.70

CONCORD FIBRE OPTIC AUDIO LEADS

A range of fibre optic TOSLINK cables with superb build quality. The tips are gold plated to prevent corrosion so your connections remain solid. Suitable for achieving excellent audio reproduction in home cinemas that support Dolby Digital 5.1 (AC-3) surround sound, DTS, and more.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.0m	WQ-7301	\$15.95	\$14.35	\$12.70
3.0m	WQ-7302	\$24.95	\$22.35	\$19.70
5.0m	WQ-7303	\$39.95	\$35.90	\$31.90

INTERCHANGEABLE 3.5MM AND TOSLINK FIBRE OPTIC LEAD

An multi-purpose interconnect lead for connecting a device with mismatching or matching optical sockets. Features a spring loaded dual connector which allows you to flip between 3.5mm optical plug and TOSLINK optical.

Connection options
3.5mm optical to 3.5mm optical
3.5mm optical to TOSLINK
TOSLINK to TOSLINK

Length: 2m



Cat.	Qty 1+
WQ-7299	\$8.95

TOSLINK TO 3.5MM FIBRE OPTIC AUDIO LEAD - 1.0M

A mini-TOSLINK to 3.5mm cable for connecting a device with a 3.5mm optical output to an AV receiver with Toslink.

- Gold connectors
- Length: 1.0m



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.0m	WQ-7298	\$9.95	\$8.75	\$7.75

IR EXTENDERS

INFRARED PANEL MOUNT RECEIVER

Specifications	AR-1829
Cable length	3m
IR carrier frequency	34kHz to 60kHz
Mounting hole size	13mm
Dimensions	28(L) x 17(H)mm

Used for creating a clean, flush mounted IR receiver. Screw the thread into the wall & connect the 3.5mm plug to your source device.



	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1829	\$14.95	\$13.35	\$11.70

BIDIRECTIONAL IR EXTENDER OVER CAT5E - 100M

Control AV equipment remotely from either the source or receiver that are up to 100m apart. You could, for example, change the media playing on a DVD player in another room whilst standing in front of the TV, or control the TV volume from the room with the media player. Suitable for domestic and commercial applications including digital signage, demo stations or video conferencing etc, and features wide band IR circuitry to suit modern PayTV remote controls. The kit includes two extenders with IR LED on a 3m lead, and a mains power adaptor. All you need is standard Cat5e UTP network cable.

- Bi-directional IR path
- 2 x IR emitter output connections
- Single power supply on either TX or RX unit
- Each device can be TX or RX

Specifications	AR-1809
IR frequency range	30kHz to 60kHz
IR lead length	3 metres
Power	12V/200mA (Mains adaptors inc)
Dimensions	75(L) x 64(W) x 29(H)mm
Weight	28g



	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1809	\$79.95	\$71.95	\$63.95

FOXTEL® IQ2 COMPATIBLE IR REMOTE CONTROL EXTENDER

Allows you to control your video source devices like set top boxes, a Blu-Ray/DVD player, or even a HDMI switcher from another room. For those situations where you have a source transmitting to one or more TVs in different rooms.



Specifications	AR-1827
IR receiving range	>8m
Foxtel® IQ2 compatible	Yes
Transmission range	Up to 50m in clear sight
Carrier frequency	433.92MHz
Power supply	9VDC/150mA
Dimensions	70(L) x 50(W) x 20(H)mm

There is a receiver which plugs into the source device and a transmitter which picks up a signal from your remote control and relays it to the receiver.

	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1827	\$54.95	\$49.45	\$43.90

IR REMOTE CONTROL EXTENDER TO SUIT PAYTV

Control a VCR, DVD/Blu-ray player, Hi-Fi and PayTV box (including most modern ones) from another room up to 30m away. This clever design uses a battery shaped transmitter that replaces one of the batteries in the remote control. With some electronic smarts it is able to repeat the Infrared signal to the receiver in the other room to control the AV equipment. The AAA sized transmitter includes a rechargeable battery, which lasts for months before needing a recharge, and a AA adaptor for use in larger remotes. The receiver can be either placed within 10m of the AV equipment or hidden away with the use of the small IR output cable.

- Supplied with transmitter, AA adaptor, two rechargeable 2/3AA batteries, receiver with power supply and IR output cable on a 1.8m lead.
- Foxtel® IQ compatible
- MySky® NZ compatible

Note: Remote control & standard batteries not included

Specifications	AR-1821
Transmission range	30m
Frequency	433.92MHz
Channels	3
Dimensions	100(Dia.) x 54(H)mm



ADDITIONAL TRANSMITTER & BATTERIES FOR AR-1821 REMOTE CONTROL EXTENDER

The AR-1821 Remote Control Extender has provision for a second remote control so you can control a second device, say a DVD or Blu-ray player, from the other room. This pack includes the transmitter, AA adaptor, two rechargeable 2/3rd AA batteries and IR output cable.

	Cat.	Qty 1+	Qty 2+	Qty 4+
Remote Control Extender	AR-1821	\$69.95	\$62.95	\$55.95
Additional TX Batteries	AR-1823	\$34.95	\$31.45	\$27.90

4 CHANNEL COMPACT INFRARED EXTENDER KIT

Some aesthetically pleasing home theatre setups may not be 100% functional. Video/audio source devices like DVD players or stereo systems may be hidden in a cabinet to create a clean minimalist setup. In these scenarios, the signal from your remote control may be partially or completely blocked. To overcome this issue you can use this IR repeater extender kit which give you full control of your devices all through a tiny little IR receiver.

Plug the IR receiver in (to receive signals from your remote), then connect up to 4 devices to the emitter outlets to easily control all those sources even if they're hidden from view. Thanks to the 3M adhesive backing on the IR receiver the emitters can be mounted in an unobtrusive location. The kit is 4 channel so will accept up to 4 source devices. The IR repeater unit includes mounting holes and screws for attachment to your cabinet or other surface.

- Kit includes:
- 2 x Dual IR emitter cables included
 - 1 x IR receiver cable (to receive signals from remote controls)
 - 1 x Mains plugpack
 - 1 x Repeater/Extender



Specifications	AR-1828
Cable length	3m
Dimensions	103(L) x 32(W) x 16.5(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1828	\$59.95	\$53.95	\$47.90

IR EMITTER KIT

Are your home entertainment components hidden away in a cabinet? This IR Emitter Kit solves the problem and is the perfect way to simplify the way you control your home entertainment system.

Many of today's home theatre / Hi-Fi systems are set up with the components hidden from view in a cabinet. Great for aesthetics and security, but what do you do when you want to use the remote? You have to keep the cabinet door open, which defeats the purpose of having the components in the cabinet in the first place. You can also use it to extend the range of your IR remote control to another room, or run all your remote controlled devices from a single sensor. This IR Emitter Kit act like a hub, enabling you to interface all your IR remote controlled devices together and control them from a single sensor point.

Up to six IR emitters to be connected to a single point and you can add extra emitters as you need.



	Cat.	Qty 1+	Qty 2+	Qty 4+
2 Input IR Extender	AR-1812	\$79.95	\$71.95	\$63.95
Spare Emitters - Single	AR-1811	\$7.95	\$6.95	\$6.25
Spare Emitters - Dual	AR-1813	\$9.95	\$8.75	\$7.75
Spare IR Receiver	AR-1819	\$24.95	\$22.35	\$19.70

COMPOSITE AV CAT5 BALUN WITH IR EXTENDER

Transmit crystal-clear audio and video signals over long distances via economical Cat5 cable. You can also use it for extending the range of your remote control. The wideband IR will receive signals from many types of remotes. Simply connect stereo audio and composite video to the transmitter and receiver, then hook up the IR sensors to your equipment.

- Signals can be transmitted up to 300 metres on UTP.

Specifications	QC-3681
Video	75 ohm unbalanced
Audio	600 ohm balanced
Bandwidth Video	DC - 12MHz
Audio	50Hz - 15kHz
Propagation distance	Up to 300m via UTP
Power requirements	12VDC 30mA max
Dimensions	64(W) x 73(D) x 29(H)mm



SPARE IR RECEIVER FOR CAT5 BALUNS

Spare or replacement receiver for

- QC-3681
- QC-3682
- QC-3685
- QC-3686



	Cat.	Qty 1+	Qty 4+	Qty 10+
Cat5 Balun	QC-3681	\$99.95	\$89.95	\$79.95
Spare IR Receiver	AR-1819	\$24.95	\$22.35	\$19.70

IR EXTENDERS (CONTINUED)

WI-FI REMOTE CONTROLLER WITH APP

A beautifully designed intelligent Wi-Fi remote controller that mounts to the ceiling, wall or shelf in the room and allows you to remotely control appliances and electronic equipment across the network or Internet from your Smartphone. It works by storing the infrared operation commands of the TV, set-top boxes, Hi-Fi, speakers, air conditioning etc. You then use an APP on your iOS® and Android® Smartphone to remotely control the appliances just as if you were standing in front of them with the device's remote. This Wi-Fi remote controller uses SmartLink technology for easy network setup, and the built-in infrared LED's transmits the IR signal 360° to make sure the signals reach most parts of the room. Very easy to install, simply place on the table or mount on the wall or ceiling. Supplied with mains power adaptor and mounting screws.

- Support Wi-Fi network.
- Support SmartLink technology
- Support all IR home appliances

Specifications	AR-1950
Input voltage	5V
Input current	1A
IR transmission frequency	38kHz
RF transmission frequency	433MHz
Wireless standard	Wi-Fi -2.4GHz
Dimensions	110(Dia.) x 25(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1950	\$64.95	\$58.50	\$51.95

AV SELECTORS & SWITCHES

2 WAY AV SELECTOR SWITCH

Switch between two composite video and stereo audio sources. Easy push-button operation.



Back of unit

Specifications	AC-1650
Channel Separation	60dB @ 1kHz
Cross-talk	70dB @ 1kHz
Dimensions	135(W) x 50(D) x 32(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1650	\$12.95	\$11.35	\$10.35

4 WAY AV SELECTOR

Connect up to four AV devices such as DVD players, VCRs or gaming consoles with a single output to your TV and switch between them as required.

- Inputs can be either composite or S-video.
- Easy-to-use pushbutton front panel.
- Composite and S-video inputs
- Dimensions: 190(W) x 112(D) x 47(H)mm



Back of unit



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1652	\$24.95	\$22.35	\$19.70

AV AMPLIFIERS

4 WAY AV STEREO DISTRIBUTION AMPLIFIER

Designed to split a stereo A/V signal across 4 channels without loss of image or sound quality. You can wire the rumpus room, outside entertainment area, bedrooms, lounge room or anywhere else you would like to access audio and video from a central source. You can also use it to record to up to four sources at the same time.

- 12VDC operated
- Mains plugpack included.
- Composite video input 1-3Vpp; 75 ohms
- Stereo audio input -20dB; 25k ohms
- 4 x Composite video outputs 1Vpp output; 75 ohms
- 4 x Stereo audio outputs
- RCA Input & output connectors
- Size: 176(W) x 90(H) x 25(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1646	\$54.95	\$49.45	\$43.90

AV BALUNS

POWERED CAT5 VGA BALUNS WITH AUDIO

Able to transmit VGA and audio signals across a standard UTP or STP CAT5 cable for distances up to 300 metres. Adjust the brightness and skew of the image with the peak and gain options.



Use for home or commercial applications, for example, classrooms, lecture halls, auditoriums, retail kiosks, video information displays, tradeshow, etc.

- Ideal for VGA monitors or LCD projection screens.
- Supports up to 1920 x 1200 pixels.
- Supplied as a sender and receiver pair with plug packs included.



Specifications	AC-1671
Power requirements	5VDC for both sender and receiver
Vertical freq range	60/75/85Hz
Supported resolutions	640X480, 800X600, 1024X768, 1280X720, 1280X768, 1280X960, 1280X1024, 1600X900, 1600X1200, 1920X1080, 1920X1200
Includes	2 x right angle mounting brackets for send unit
Sender Dimensions	100(L) x 65(W) x 26(H)mm
Receiver Dimensions	81(L) x 43(W) x 23(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1671	\$129.00	\$115.95	\$102.95

FOR AN EXTENSIVE RANGE OF AV RECEIVER/TRANSMITTERS SEE PAGE 404

HDMI CONVERTERS & UPSCALERS

IN-LINE HDMI RESOLUTION UPSCALER - 720P/1080P TO UHD4K

Upscale 720p or 1080p video/audio content from a HDMI source to a new 4K TV that lacks a built-in upscaling feature. Upscaling is the process of increasing the resolution, while keeping pixelation to a minimum by calculating where new pixels should be located. This device also includes a HDMI micro B female port allowing your laptop or Tablet connection to a 4K screen. Totally inline so there's no need for an external power supply.



- Upscaled 720p/1080p/30Hz to 4K x 2K (4096x2160) /30Hz
- HDMI A Plug to HDMI A Socket
- Supports HDMI 1.4a standard
- Supports 3D video and HDCP
- Dimensions: 60(L) x 60(W) x 16(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1750	\$69.95	\$62.95	\$55.95

MHL TO HDMI CONVERTER WITH 11 PIN SAMSUNG® ADAPTOR

Mobile High-Definition Link (MHL) is a new feature built into popular Smartphone and Tablet devices, which enables full HD 1080p video output from the Micro-B USB port. Connect this MHL to HDMI Converter to your HDTV (HDMI cable not included) to view full 1080p video at 30/60Hz or mirror everything on and from your MHL equipped device. Supplied with an 11 Pin Micro-B Adaptor for use on Samsung® S3/4 or Note 2.

The converter requires USB power (power cable not included) which can connect to a USB power adaptor or from a USB port on an HDTV.

- Supports resolutions up to 1080p @ 30/60Hz
- Supports device mirroring
- Supports most Android Smartphones & Tablets
- Lead Length: 90(L)mm
- Dimensions: 53(L) x 28(W) x 11(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WQ-7424	\$24.95	\$22.35	\$19.70

HDMI CONVERTERS & UPSCALERS

HDMI INTRODUCTION



In the world of electronics and computing, the glamorous products get all the attention. Whether it be Apple's® latest offering, or the new super high definition flat screen technology, the really heroic products sometimes get forgotten. For example, USB interface has transformed connectivity in computing. So has Wi-Fi (and to a lesser extent Bluetooth) in wireless connectivity.

The same could be said for that fantastic High Definition Multimedia Interface, or HDMI.

Jaycar supported HDMI from a very early date and we continue to do so. We not only have the best range of HDMI leads, adaptors, etc., we also have an unbelievable range of HDMI products.

Check the following pages and just see what you can do to enhance your multimedia experience with HDMI technology

HDMI CONVERTERS & UPSCALERS (CONTINUED)

COMPOSITE AV TO HDMI CONVERTER

A universal converter for analogue composite input to HDMI 1080p (60Hz). The analogue to digital conversion module will deliver a sharp and realistic image thanks to its processing technology. Power is delivered to the unit through the mini USB port. Enable old devices such as Sega master systems, DVRs, or VHS players to playback video and audio on more modern HDMI equipped displays.

- Supports HDMI 1080p 60Hz / 720p 60Hz output
- Requires 5VDC power through the mini USB port (power supply included)



Specifications	AC-1722
Input	Composite video and L/R Analogue audio (Yellow/White/Red RCA)
Composite input	PAL/NTSC3.58/NTSC4.43/SECAM/PAL-M/PAL-N
Output	HDMI
Dimensions	60(W) x 54(L) x 20(H)mm
Weight	80g

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1722	\$84.95	\$76.50	\$67.95



2 X HDMI TO VGA/COMPONENT & ANALOGUE/DIGITAL AUDIO CONVERTER

No need to upgrade to expensive LCDs or plasmas just yet. This converter can accept 2 HDMI sources, and features a switch to select which device you want to output. Connect HDMI signals from DVD, Blu-ray or set top boxes and output to VGA, component video, with digital (TOSLINK) or analogue (3.5mm stereo) audio outputs for connection to almost any TV or PC monitor. Supports resolutions up to 1080p; output resolution is determined by input.



- Supports NTSC and PAL systems
- HDCP Support
- HDMI 1.3 compliant

Specifications	AC-1721
Input	2 x HDMI
Video Output	1 x YPbPr / 1 x VGA
Audio Output	1 x TOSLINK / 1 x 3.5mm Stereo
Supported resolutions	HDMI Input: up to 1080p VGA Output: up to 1080p @ 60Hz YPbPr Output: up to 1080p @ 50Hz / 60Hz 5VDC power supply (included)
Power	
Dimensions	34(H) x 128(W) x 94(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1721	\$149.00	\$133.95	\$118.95



HDMI TO VGA + STEREO AUDIO CONVERTER

Convert a HDMI source such as a Blu-ray player to a VGA display. This unit will also convert the audio stream from HDMI to analogue audio which can be output to some speakers or headphones using the 3.5mm audio socket. No power supply is required as it's powered by the HDMI signal.



Specifications	AC-1724
HDMI input formats	480p, 576p, 720p, 1080p
VGA video output format	480p (720x480), 576p (720 x 576), 720p (1280x720), 1080p (1920x1080)
Frequency	50/60Hz
Cable Length	175mm
Dimensions	55(L) x 41(W) x 17(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1724	\$24.95	\$22.50	\$19.95



VGA & R/L AUDIO TO HDMI SCALER CONVERTER

Combines the audio and upscale the VGA output signal on a computer to 1280 x 720p for optimum viewing on a HDTV. Ideal for computers that only have a VGA output.

- HDMI resolution fixed to 1280x720p
- HDMI 165MHz/1.65Gbps per ch (6.75Gbps total)
- HDMI 8 bit per channel

Signal inputs/outputs:

- Input signal: VGA, R/L audio
- Output video signal: HDMI 720p
- VGA resolutions:
 - 640 x 480 at 60/72/75/85Hz
 - 800 x 600 at 60/72/75/85Hz
 - 1024 x 768 at 60/70/75/85Hz
 - 1280 x 720 at 60Hz
 - 1280 x 768 at 60/70/75/85Hz
 - 1280 x 800 at 60/70/75Hz
 - 1280 x 960 at 60Hz, 1280 x 1024 at 60Hz
 - 1440 x 900 at 60/75/85Hz, 1920 x 1080 at 60Hz
 - 1920 x 1200 at 60Hz, 1920 x 1440 at 60Hz
- Vertical freq range: 50/60Hz
- Video amp bandwidth: 1.65Gbps/165MHz
- Weight: 0.68kgs
- Dimensions: 88(L) x 68(W) x 25.5(H)mm



*Note: It is possible that several resolutions are limited on a few displays

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1617	\$99.95	\$89.95	\$79.95



3G SDI TO HDMI CONVERTER

These converters allow conversion from HDMI to 3G SDI signals and vice versa. Conversion of broadcast quality 3G SDI video signals means common HDMI equipped TVs and PC monitors can playback uncompressed 2.97Gbps digital footage from cameras supporting this format. Saves you from needing to buy a purpose built display or video card that accepts 3G SDI signals. They are also backwards compatible with lower bandwidth SD and HD SDI signals. Security cameras are beginning to adopt 3G SDI standard due to the vastly superior image quality they can produce. The ability of SDI cables to run up to 100m without a booster makes them ideal for security use. This also provides an alternative way transmit HDMI over long distances, simply use AC-1729 as the transmitter with AC-1727 as the receiver.

Two models available:

3G SDI TO HDMI CONVERTER - AC-1727

- Operation at 2.970Gbps, 1.485Gbps and 270Mbps
- Supports SMPTE 425M, SMPTE 424M, SMPTE 292M, SMPTE 259M-C
- Equalized and re-clocked loop output Integrated audio de-embedder for a maximum of 8 channel, 48 kHz audio
- Conversion from SMPTE 425M level B to Level A 1080p 50/59.94/60 4:2:2 10-bit



Specifications	AC-1727
Supported input/output resolutions	480i, 576i, 720p @ 50/60Hz, 1080i @ 50/60Hz, 1080p @ 24/25/30/50/60Hz
Input	Locking BNC SDI and DC
Output	HDMI
Power consumption	5W
Dimensions	80(L) x 43(W) x 23(D)mm

HDMI TO 3G SDI CONVERTER - AC-1729

- SDI interface operates at bitrates of 2.970 Gbit/s, 2.970/1.001 Gbit/s, 1.485 Gbit/s, 1.485/1.001 Gbit/s and 270 Mb/s.
- Supports SDI output distance up to 100 metres (3G-SDI), 200 metres (HD-SDI), or 300 metres (SD-SDI)



Specifications	AC-1729
Supported input/output resolutions	480i, 576i, 720p@50/59.94/60, 1080i@50/59.94/60, 1080p@23.97/24/25/29.97/30/50/59.94/60
Input	HDMI
Output	BNC SDI
Power consumption	5W
Dimensions:	80(L) x 43(W) x 23(D)mm

⬆	Cat.	Qty 1+	Qty 4+	Qty 10+	
	3G SDI to HDMI Converter	AC-1727	\$109.00	\$89.95	\$79.95
	HDMI to 3G SDI Converter	AC-1729	\$109.00	\$89.95	\$79.95



HDMI CONVERTERS & UPSCALERS (CONTINUED)

*4K HDMI TO COMPOSITE AUDIO & VIDEO CONVERTER

Convert digital 4K UHD HDMI video and audio signal from your Blu-ray player or computer to composite video signal for connection with your older style CRT/LED/LED monitors or projectors. HDMI output is converted to normal CVBS (standard-definition 480i, 576i) and analogue audio output.

NEW
2015

- No installation driver required
- Flexible and portable
- High quality scaling technology for input resolutions
- Support NTSC and PAL two standard TV formats output
- Compatible with HDMI1.4
- Support HDMI input resolution up to 4K x 2K@30Hz



HDMI 2.0

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1772	\$149.00	\$133.95	\$118.95

*4K HDMI TO VGA & STEREO AUDIO CONVERTER

Convert digital 4K UHD HDMI video and audio signal from your Blu-ray player or computer to standard VGA and RCA stereo audio signal for connection with your older style CRT/LED/LED monitors or projectors.

NEW
2015

- No installation driver required
- Flexible and portable
- High quality scaling technology for input resolutions
- Multiple output resolution setting in OSD menu
- Compatible with HDMI1.4
- Support HDMI input resolution up to 4K x 2K@30Hz

HDMI 2.0



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1770	\$149.00	\$133.95	\$118.95

*VGA & RCA AUDIO TO HDMI 4K UPSCALER CONVERTER

The VGA to HDMI upscaler converter is a universal converter for analogue VGA input to HDMI 4K x 2K@60Hz output.

The analogue to digital conversion in this module employs 10 bits maximal 297MSPS sampling, black/white level expansion, colour transition improvement, dynamic range expansion, blue stretch, auto-detect and auto-convert the VGA signal to HDMI output. It allows making the video come alive, delivering the sharpest and most realistic HD visuals. Supplied with a 5VDC, 1A mains power adaptor.

NEW
2015



HDMI 2.0

- No installation driver required
- Flexible and portable
- Advanced signal processing with great precision, colours, resolution and details
- Support multi-VESA standard VGA formats input
- Support HDMI 4Kx2K@60Hz, 4Kx2K@30Hz, 1080p@60Hz, or 720p@60Hz output

Specifications	AC-1774
Input ports	1 x VGA, 1 x Earphone, 1 x mini USB
Output	1 x HDMI
VGA input resolution	640 x 480p@60Hz, 800 x 600@60Hz, 1024 x 768p@60Hz, 1280 x 720p@60Hz, 1280 x 768p@60Hz, 1280 x 1024p@60Hz, 1360 x 768p@60Hz, 1920x 1080p@60Hz.
HDMI output resolution	4Kx2K@60Hz, 4Kx2K@30Hz, 1080p@60Hz, 720p@60Hz
Power Consumption (Max)	3W
Dimensions	93(D) x 84(W) x 28(H)mm, 300g

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1774	\$149.00	\$133.95	\$118.95

*COMPOSITE AUDIO VIDEO TO HDMI 4K UPSCALER CONVERTER

The AV to HDMI 4K Upscaler Converter is a universal converter for analogue composite input to HDMI 4Kx2K@60Hz output. The analogue to digital conversion in this module employs 10 bits maximal 297MSPS sampling, black/white level expansion, colour transition improvement, dynamic range expansion, blue stretch, auto-detect and auto-convert the composite signal to HDMI output. Making video come alive, delivering the sharpest, most realistic HD visuals available. Supplied with a 5VDC, 1A mains power adaptor.

NEW
2015



HDMI 2.0

- No installation driver required
- Flexible and portable
- Provide advanced signal processing with great precision, colours & resolution
- Support PAL, NTSC3.58, NTSC4.43, SECAM, PAL/M, PAL/N standard TV formats input
- Support HDMI 4Kx2K@60Hz, 4Kx2K@30Hz, 1080p@60Hz or 720p@60Hz output.

Specifications	AC-1776
Input ports	1 x RCA (Yellow, White, Red), 1 x S-Video, 1 x Mini USB
Output	1 x HDMI
CVBS/S-VIDEO input	PAL, NTSC3.58, NTSC4.43, SECAM, PAL/M, PAL/N standard TV formats
HDMI output resolution	4Kx2K@60Hz, 4Kx2K@30Hz, 1080p@60Hz, 720p@60Hz
Dimensions	93(D) x 84(W) x 28(H)mm, 300g

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1776	\$149.00	\$133.95	\$118.95

*Product may vary from the one shown

HDMI ADAPTORS

DVI-D TO HDMI CABLE

- HDMI to DVI-D connector



CONCORD

↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	WQ-7407	\$24.95	\$22.35	\$19.70
	3.0m	WQ-7406	\$34.95	\$31.45	\$27.90

HDMI 1.4 TO MICRO D PLUG LEAD 2M

HDMI to Micro D plug with 2m lead.



ALL HDMI LEADS HIGH SPEED WITH ETHERNET

WQ-7911

DISPLAY PORT PLUG TO HDMI SOCKET

WQ-7422



CONVERTER LEAD MINI DVI PLUG TO HDMI SOCKET

WQ-7423



1 YEAR WARRANTY

↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	150mm	WQ-7422	\$29.95	\$26.90	\$23.70
	300mm	WQ-7423	\$24.95	\$22.35	\$19.70
	2.0m	WQ-7911	\$34.95	\$31.45	\$27.90

MICRO HDMI PLUG TO HDMI SOCKET ADAPTOR

Connects your Smart phone, camera or other device with micro HDMI socket to any TV with a HDMI connection.

- Colour: Black
- Gold plated connectors



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-3649	\$9.95	\$8.75	\$7.75

HDMI PLUG TO HDMI SOCKET SWIVEL ADAPTOR

Connect HDMI cables where space is an issue such as wall mounted TV's with this adaptor which swivels up to 180°.

- Gold plated connectors



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-3647	\$12.95	\$11.35	\$10.35

HDMI ADAPTORS

PA-3640



PA-3642



PA-3645



PA-3644



Type	Cat.	Qty 1+	Qty 4+	Qty 10+
HDMI Socket to Socket	PA-3640	\$16.95	\$14.95	\$13.35
HDMI Plug to DVI-D	PA-3642	\$16.95	\$14.95	\$13.35
HDMI Socket to DVI-D Plug Adaptor	PA-3644	\$16.95	\$14.95	\$13.35
Mini HDMI Plug to HDMI Socket Adaptor	PA-3645	\$9.95	\$8.75	\$7.75

HDMI EXTENDERS

HDMI OVER 1 X CAT5E/6 - 50M WITH IR EXTENDER

Transmit HDMI signals over a single Cat5e/6 cable at distances up to 50m. This may be preferable to long runs of HDMI cable since HDMI cables are more expensive, troublesome to feed through walls, can't be bought as rolls and can't be crimped (or can with great difficulty!). Cat 5e/6 is cheap, flexible and mouldable making it ideal for extending HDMI for use in the home, in lecture theatres, or in retail environments. This model also transmits IR signals through the Ethernet cable allowing you to use your remote controls when not in front of the transmitting unit such as a Blu-ray player. Both transmitter and receiver requires a 5VDC power supply (supplied).

- Embedded IR control path
- HDMI 1.3b and HDCP 1.1/DVI1.1 compliant
- Achieve 1080p from the sources up to 50m using Cat6 or 40m using Cat5e
- Can support longer distances (may incur resolution degrading)
- Range: 50m
- IR Frequency: 20kHz - 60kHz
- Video support: 480i / 480p / 720p / 1080i / 1080p
- Audio support: LCPM, Dolby True HD & DTS Master Audio, 7.1 compliant
- Input: 1 x RJ45, 1 x 3.5mm (IR extender)
- Output: 1 x HDMI, 1 x 3.5mm (IR extender)
- Dimensions: 100(L) x 65(W) x 25(H)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
	AC-1732	\$149.00	\$133.95	\$118.95

HDMI UHD4K OVER 1 X CAT 6 - 40M WITH IR EXTENDER

Extend UHD4K HDMI signals to a display 40m away or 1080p signals up to 70m from a HDMI source. This extender converts standard HDMI signals to HDBaseT signals and transfers them over a common Cat 6 cable. This is more affordable than long HDMI cable runs and allows for greater distances between a display and source. Includes bidirectional IR control, so the source or display can be controlled from either end with your remote. Ideal for lecture theatres, shopping centres, or reception areas.

Transmission distance:

- 70 metres: 1080p at 60Hz 36bit; 3D 1080p at 30Hz 36bit;
- 40 metres: 1080p at 60Hz 48bit; 1080p at 120Hz 24bit; 3D 1080p at 60Hz 36bit; 4K x 2K@30Hz@24bit



Specifications:

HDMI 1.4 supported

Power consumption max: 20W

IR Frequency: 20kHz - 60kHz

Video support: 480i / 480p / 720p / 1080i / 1080p / 4K

Audio support: LCPM, Dolby True HD & DTS Master Audio, 7.1 compliant

HDMI receiver: 1x HDMI Female port/1 x CAT6, 1x IR Transmitter/1x IR Receiver

HDMI transmitter: 1x HDMI Female port/1 x CAT6, 1x IR Transmitter/1x IR Receiver

Dimensions: 65(W) x 100(D) x 25(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1736	\$299.00	\$269.00	\$239.00

HDMI OVER 2 X CAT5E/6 - 30M WITH IR EXTENDER

Transmit HDMI video/audio and IR over distances up to 30m over two common Cat6 cables. This is a reliable and cost-effective method for outputting a HDMI source to a distant display. Perfect for lecture halls, home theatres, or video conference rooms. Only 1 of the extenders require a 5VDC power supply (supplied).

- Embedded IR control path
- HDMI 1.3b and HDCP 1.1/DVI1.1 compliant
- Achieve 1080p from the sources up to 30m using Cat6 or 20m using Cat5e
- Can support longer distances (may incur resolution degrading)
- Range: 30m
- IR Frequency: 20kHz - 60kHz
- Video support: 480i / 480p / 720p / 1080i / 1080p
- Audio support: LCPM, Dolby True HD & DTS Master Audio, 7.1 compliant
- Equalisation: 8-level digital on RX
- Input: 1 x RJ45, 1 x 3.5mm (IR extender)
- Output: 1 x HDMI, 1 x 3.5mm (IR extender)
- Dimensions: 100(L) x 65(W) x 25(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1730	\$74.95	\$67.50	\$59.95

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here! Check our website for over 3,500 pages of data!

WALL PLATE HDMI & IR REPEATER CAT5E EXTENDER

A neat and simple wall plate HDMI extender kit. This kit extends your high definition AV source from your Blu-ray DVD Players, PS3, XBOX etc. up to a maximum 30m via Cat5 cables through the wall cavities. Supports full 1080p high definition of up to 30m. Integrates an infra-red extender for full control from the receiving end. RJ45 connections on the rear of each unit makes for easy connection.



- CAT5 / 5e / 6 cable compliant
- HDMI 1.3 compliant
- Transmission range of up to 30m Cat 6
- Supports up to true HDMI (1080p)
- Transmission Range: 100m (480i, 576i, 480p, 576p) / 70m (720p, 1080i) / 30m (1080p)
- Mains power supply included
- Wall plates measure: 115(H) x 70(W) x 32(D)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1659	\$129.00	\$115.95	\$102.95

TCP/IP CAT5E HDMI EXTENDER - 100M WITH IR REPEATER

Utilise affordable and flexible Cat5e/Cat6 cables to join a HDMI source to a display up to 100m away. Doing so with a long HDMI cable can be expensive or result in display issues due to limitations with the HDMI standard. This device makes use of the TCP/IP protocol used for computer networking, so you get the added bonus of being able to split a HDMI signal to multiple displays through a common home router or switch. (requires extra receivers available separately). An IR repeater is built-in allowing full use of your remote control over these long distances.



- HDMI 1.3, HDCP 1.1 and DVI 1.1 compliant
- Supports Deep Colour up to 12 bits/colour
- Supports IR re-transmitting so remote controls can be used



Cable range for resolution:

- Cat 5e: 70m, 1080p
- Cat6: 100m, 1080p

Specifications	AC-1734
Frequency bandwidth	2.25Gbps (single link)
Range	100m Cat6
IR Frequency	20kHz - 60kHz
Video support	480i / 480p / 720p / 1080i / 1080p
Audio support	LCPM, Dolby True HD and DTS Master Audio, 7.1 compliant
Equalisation	8-level digital on RX
Input	1 x RJ45, 1 x 3.5mm (IR extender)
Output	1 x HDMI, 1 x 3.5mm (IR extender)
Dimensions	100(L) x 65(W) x 25(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
HDMI Extender	AC-1734	\$179.00	\$160.95	\$142.95
Spare TCP/IP HDMI Receiver	AC-1735	\$89.95	\$80.95	\$71.95

HDMI OVER COAX - 100M WITH IR EXTENDER

HDMI extender over single coaxial cable with IR control is an ideal method to transmit HDMI signal over long distances. This device is an alternative to expensive HDMI amplified cables and allows you to use your existing coaxial cables/sockets already wired in your home or office. The kit comprises of a transmitter, receiver and two power supplies. The HDMI source, whether it is set-top box, DVD player, or gaming console, connects to the transmitter box with a HDMI cable and the receiver box to the HDTV display. It supports digital video formats in Deep Colour Mode at up to 36 bits (12bits/colour) and 48kHz LPCM Digital audio. It also equalises and recovers incoming TMDS data before re-transmitting it in high quality, regardless of the incoming signal quality. Supplied with 2 x mains adaptors.



- Compliant with HDMI 1.3, HDCP 1.1 standards
- Supports digital video formats in Deep Colour Mode and 48kHz LPCM Digital audio
- Equalises and recovers incoming TMDS data
- Efficient IR control system, IR transport channel can be forward or backward



Specifications	AC-1740
Range	100m
HDMI Transmitter ports	1 x HDMI, 1x IR Tx, 1x BNC
HDMI Receiver ports	1 x HDMI, 1x IR Rx, 1x BNC
Power Supply	2x 5VDC 1A
ESD Protection	
Dimensions	80(L) x 41(W) x 25(D)mm
Weight	150g

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1740	\$329.00	\$299.00	\$265.00

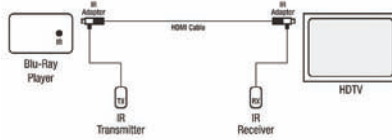
HDMI IR EXTENDERS (CONTINUED)

WIDEBAND INFRARED EXTENDER OVER HDMI

This infrared extender repeats the IR signal from your remote control over the existing high-speed HDMI cable. This means you can control the AV source (Blu-ray, DVD player, etc.) in a cabinet or other room from in front of the TV screen. The two small HDMI adaptors attach to each end of the HDMI cable and derive their power from the HDMI port so no external power supply is needed. An IR receiver and transmitter on 1.5m leads plug into these adaptors. The system handles 1080p Full HD 3D, and supports wideband IR signals from modern remote controls.

Package includes:

- 2 x HDMI Adaptors
- IR Transmitter with 1.5m cable
- IR Receiver Pigtail with 1.5m cable
- Dimensions: 20(W) x 15(H)mm



NEW
2015

	Cat.	Qty 1+	Qty 2+	Qty 4+
	AC-1744	\$49.95	\$44.90	\$39.90

TECH TALK!



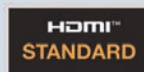
HDMI began in 2002, a digital format for Video and audio which singlehandedly replaced all analogue connections such as RCA, Scart, and S video just to name the most common.

There were many advantages of the DIGITAL format, but the most obvious was that the fact that once a HD source like BluRay was connected to a HD 1080p panel, there was no going back to analogue ever again. The improvements were startling in both picture and sound.

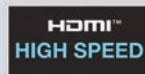
HDMI version	1.0	1.1	1.2	1.3	1.4	2.0
Date initially released	2002	2004	2005	2006	2009	2013
Maximum total throughput (Gbits)	4.95	4.95	4.95	10.2	10.2	18
Maximum colour depth	24	24	24	48	48	48
Maximum resolution over at 24-bit	1920 x 1200p60	1920 x 1200p60	1920 x 1200p60	2560 x 1600p60	4096 x 2160p30	4096 x 2160p60

HDMI 1.4 version in 2009 had a huge impact by offering some exciting new features.

- Ethernet over HDMI
- Audio Return Channel
- 3D Support
- Support for 4K x 2K resolution
- Additional Colour Spaces
- HDMI Micro Connector supporting video resolutions up to 1080p.
- Automotive Connection



Not backward compatible



Fully backward compatible

- HDMI 1.4a version in 2010. Added 3D format for broadcast content.
- HDMI 1.4b version in 2011. Enabled 3D 1080p video at 120 Hz, so that each eye can receive full HD.

HDMI 2.0 VERSION IN 2013 THESE ARE THE MAIN IMPROVEMENTS

- Increases bandwidth to 18Gbps from 10.2, over 75% more bandwidth.
- Resolution ultra 4K @50/60, (4 times that of 1080p/60 video resolution)
- Wide angle theatrical 21:9 video aspect ratio. instead of 16x9
- HDCP 2.2 copy protection.

WHY DO WE NEED SUCH HIGH DEFINITION?

Most people are choosing larger TVs, 55" are very common. If you look at the picture like 720p [cable TV box] larger than 32" you will notice that it is quite fuzzy, view it on a 55" and you will find the picture truly bad. So with larger TVs say 80 to 100" we need higher resolution. This is the main reason the industry is trying to improve the resolution. Another reason is that 3D requires at least 1080p per eye so again the need for higher resolution is a must.

WHAT DOES THIS MEAN FOR YOU?

DO I NEED NEW CABLES?

YES [standard] NO [high speed with or without Ethernet]

WILL I NEED NEW HARDWARE?

YES [1080p throughput= 10.2 Gbits, UHD 4k = 18 Gbits]

WILL ULTRA 4K WORK ON MY TV?

NO [needs HDCP 2.2]

HDMI SWITCHERS & SPLITTERS

HDMI 2.0 UHD SPLITTERS

These HDMI UHD splitters with HDCP 2.2 are an advanced solution for splitting a single HDMI input to two HDMI outputs (AC-1766) and four HDMI outputs (AC-1768). They provide high performance audio and video output through HDMI cables up to 4K2K resolution and is capable of receiving and transmitting up to 9Gbps of bandwidth with no data loss. Supporting the latest features you can be assured of reliable and high quality HDMI distribution.

- Support smart auto switch
- IR and panel button control



NEW
2015

HDMI 2.0 SWITCHERS WITH REMOTE

High performance HDMI switchers with remote control. It supports all 3D TV formats in addition to all HDTV formats up to 4K x 2K. On top of that, the remote control gives complete control over the selection of sources and makes the device incredibly user friendly.

Available in two different models:

Common features:

- Support smart auto switch
- IR and panel button control



NEW
2015

Specifications	AC-1766	AC-1768
Compliant with	HDMI2.0, HDCP2.2 and DVI1.0	HDMI2.0, HDCP2.2 and DVI1.0
Support video format	up to 4K2K @ 30Hz with 24bit RGB/YcbCR 4:4:4/YCBCR 4:2:2, and up to 4K2K @ 60Hz with 12 bit YCBCR 4:2:0	up to 4K2K @ 30Hz with 24bit RGB/YcbCR 4:4:4/YCBCR 4:2:2, and up to 4K2K @ 60Hz with 12 bit YCBCR 4:2:0
Support 3D frame sequential video format	up to 1080p@60	up to 1080p@60
Support high resolution VESA mode video format	up to QSXGA @ 60Hz	up to QSXGA @ 60Hz
Supports	LPCM 7.1CH, Dolby® TrueHD, and DTS-HD Master Audio	LPCM 7.1CH, Dolby® TrueHD, and DTS-HD Master Audio
Input	1 x HDMI	1 x HDMI
Output	2 x HDMI	4 x HDMI

	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Way	AC-1766	\$79.95	\$71.95	\$63.95
4 Way	AC-1768	\$129.00	\$115.95	\$102.95

Specifications	AC-1760	AC-1762
Compliant with	HDMI2.0, HDCP2.2 and DVI1.0	HDMI2.0, HDCP2.2 and DVI1.0
Support video format	up to 4K2K @ 30Hz with 24bit RGB/YcbCR 4:4:4/YCBCR 4:2:2, and up to 4K2K @ 60Hz with 12 bit YCBCR 4:2:0	up to 4K2K @ 30Hz with 24bit RGB/YcbCR 4:4:4/YCBCR 4:2:2, and up to 4K2K @ 60Hz with 12 bit YCBCR 4:2:0
Support 3D frame sequential video format	up to 1080p@60	up to 1080p@60
Support high resolution VESA mode video format	up to QSXGA @ 60Hz	up to QSXGA @ 60Hz
Supports	LPCM 7.1CH, Dolby® TrueHD, and DTS-HD Master Audio	Supports LPCM 7.1CH, Dolby® TrueHD, and DTS-HD Master Audio
Input	3 x HDMI	5 x HDMI
Output	1 x HDMI	1 x HDMI

	Cat.	Qty 1+	Qty 4+	Qty 10+
3 Way	AC-1760	\$69.95	\$62.95	\$55.95
5 Way	AC-1762	\$99.95	\$89.95	\$79.95

HDMI SPLITTERS & SWITCHES

HDMI SWITCHERS

HDMI SPLITTERS WITH UHD 4K SUPPORT

These splitters will distribute a HDMI source to multiple HDMI displays simultaneously. They are typically used in retail environments, clubs, business foyers, data control centres etc. HDMI 1.4 compliant and has full support for 4K UHD and 3D video. It also supports a breadth of audio formats including Dolby-AC3, DSD and more. Compact and subtle mount it in a suitable area with double sided adhesive tape.

2 PORT HDMI SPLITTER WITH UHD 4K SUPPORT

- 3D HDMI 1.4a support
- 3D video support
- ESD protection
- HDCP 1.4 compliant

AC-1710

Specifications	AC-1710
Inputs	1 x HDMI
Outputs	2 x HDMI
Supports resolutions	up to 4K (3840 x 2160) @30Hz, 1080p @ 120Hz, and 1080p 3d@60Hz
Supports deep colour	30-bit, 36-bit, and 48-bit per pixel
Supported Audio formats	DTS-HD, Dolby-true-HD, LPCM 7.1, DTS, Dolby-AC3, DSD
Power	5VDC 1A power supplied
Power consumption	5W
Dimensions	70(L) x 60(W) x 20(H)mm

4 PORT HDMI SPLITTER WITH UHD 4K SUPPORT

- 3D HDMI 1.4a support
- 3D video support
- HDCP 1.4 compliant

AC-1712

Specifications	AC-1712
Inputs	1 x HDMI
Outputs	4 x HDMI
Supports resolutions	up to 4K (3840 x 2160) @30Hz, 1080p @ 120Hz, and 1080p 3d@60Hz
Supports deep colour	30-bit, 36-bit, and 48-bit per pixel
Supported Audio formats	DTS-HD, Dolby-true-HD, LPCM 7.1, DTS, Dolby-AC3, DSD
Power	5VDC 1A power supplied
Power consumption	5W
Dimensions	145(L) x 70(W) x 23(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Port	AC-1710	\$59.95	\$53.95	\$47.90
4 Port	AC-1712	\$109.00	\$89.95	\$79.95

HDMI SWITCHERS WITH REMOTE CONTROL

Compact HDMI switchers for small to medium scale home theatre or gaming console setups. Using the one-touch button or the supplied remote control, you can switch your TV's display between a Blu-ray player, Playstation or other HDMI source with ease. Supports HDCP repeater functions, HDMI 1.4 at 4K, 2K resolutions, & also 3D video. It is powered directly from HDMI so no external power supply is needed, and the IR receiver is on a 1.5m cable so you put the switcher at the back of the TV cabinet if required.

Specifications	Both
Support	HDMI 1.4
Resolutions	All resolutions up to 4K x 2K
Supported audio formats	PCM2, 5.1, 7.1CH, Dolby 5.1, DTS5.1, Dolby TrueHD, DTS-HD
Power consumption	0.2W

Choose between 3 or 5 input:

3 INPUT HDMI SWITCHER WITH REMOTE

Specifications	AC-1705
Inputs	3 x HDMI
Outputs	1 x HDMI
Dimensions	87(L) x 59.5(W) x 19(H)mm

AC-1705

5 INPUT HDMI SWITCHER WITH REMOTE

Specifications	AC-1706
Inputs	5 x HDMI
Outputs	1 x HDMI
Dimensions	146(L) x 70(W) x 24(H)mm

AC-1706

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
3 Input	AC-1705	\$34.95	\$31.45	\$27.90
5 Input	AC-1706	\$69.95	\$62.95	\$55.95

4 INPUT HDMI SWITCHER WITH MHL INPUT & PIP FUNCTION

Features 3 x HDMI inputs on the rear and 1 x HDMI socket at the front which can accept either a standard HDMI source (e.g. set top box, blu-ray player) or an MHL source which is now the common AV output on Android Smartphones or Tablets. This MHL input also supports RCP function which means you can control the connected Android device via any TV remote control. It also features PIP (Picture in Picture) function which when toggled, while watching a source, allows you to view and select what else is connected. This unit also supports up to 4K UHD resolution and up to 7.1ch of audio. Supplied with MHL cable and mains adaptor.

- Picture In Picture (PIP) Function
- Built-in MHL Converter on Input 1

Specifications	AC-1708
Inputs	4 x HDMI
Outputs	1 x HDMI
Supported Resolutions	Up to 4K x 2K, includes 3D
Audio Channels	2.0, 5.1, 7.1
Audio Formats	DTS Digital, Dolby Digital
Complaint	HDMI 1.4, HDCP, CEC
ESD Protection	Yes
Dimensions	145(L) x 67(W) x 23(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1708	\$99.95	\$89.95	\$79.95

4 INPUT SWITCHER WITH DIGITAL & ANALOGUE AUDIO SPLITTER

A high performance HDMI switcher which allows fast changing between up to 4 HDMI sources such as an Xbox, media player, DVD player etc. Ideal for the home, retail service-scape, lecture halls or other venues where broad HDMI source compatibility is required. This unit features a TOSLINK and 3.5mm stereo audio socket that will output audio to an array of sound system setups. Supports the latest HD resolutions up to 4K x 2K, 3D video, Dolby TrueHD and more. Operate using the one touch button on the switcher or via the supplied remote control. LED indicators on the front panel show how many devices are connected and how many audio channels are being used for the current device (2.0CH, 5.1CH, or 7.1CH). 5VDC power supply included.

- HDCP repeater support
- Compliant with HDMI 1.4a, CTS 1.4a, DVI 1.0, and VESA DisplayPort 1.1a

Specifications	AC-1707
Inputs	4 x HDMI
Outputs	1 x HDMI
3D TV support	Yes
Resolutions	All resolutions up to 4K x 2K
Audio channels	2.0CH, 5.1CH, 7.1CH
Audio formats	Dolby TrueHD, DTS-HD Master Audio 7.1CH
Power	5VDC 1A
Power consumption	3W
Dimensions	146(L) x 70(W) x 24(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1707	\$109.00	\$89.95	\$79.95

4 INPUT HDMI SWITCHER WITH AUDIO RETURN

An advanced 4 way switcher which allows you to switch between four HDMI sources to one HDMI equipped display. It features ARC (Audio Return Channel) functionality which, in short, eliminates the need to connect a separate audio cable from your TV to your sound system. As an example, to get audio from your TV to your home theatre audio system you might have to use a TOSLINK cable. With ARC you would require no extra cable other than the existing HDMI cable between the TV and home theatre audio system. The TV becomes the hub in a sense, controlling the audio output from all sources. If your devices don't support this there is still a TOSLINK and 3.5mm stereo socket for connection between TV and sound system.

Video resolution support is vast, the unit can output resolutions up to and including 4K x 2K, 3D, 1080p, 720p etc. Popular digital audio formats such as Dolby TrueHD and DTS-HD Master Audio 7.1ch are also supported. Switching sources can be done with the supplied remote control or with the buttons on the unit. LEDs indicate which inputs are active, whether the ARC function is enabled, and what audio is connected (7.1 / 5.1 / 2.0 channels).

Note: Audio Return Channel requires both your TV and audio system support HDMI 1.4.

- Inputs:
 - 4 x HDMI
- Outputs:
 - HDMI
 - TOSLINK
 - 3.5mm stereo output
- Supported resolution: Up to 4k x 2k / 3D TV support / 1080p / 1080i / 720p / 720i
- Digital Audio Support
- Dolby TrueHD
- DTS-HD Master Audio 7.1CH
- Dimensions: 191(L) x 83(W) x 25(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1709	\$119.00	\$106.95	\$94.95

HDMI SWITCHES (CONTINUED)

4 INPUT HDMI SWITCHER



Originally used as a 4 way HDMI switcher for our AR-1877 Wireless HDMI AV Sender. However, this device can also be used as a standard 4 input HDMI matrix switch. You are able to select between four different HDMI inputs and send two separate signals to the two HDMI outputs.

We are offering this as a clearance item at very competitive price; nearly a third of the cheapest 2 way matrix switch available in the market.

- Dimensions: 154(H) x 55(W) x 20(D)mm

↑	Cat.	Qty 1+
	AR-1874	\$29.95

NEW
LOW
PRICE



HDMI 4 X 2 MATRIX SWITCHER SPLITTER WITH UHD 4K SUPPORT



Distribute up to four HDMI sources to 2 displays simultaneously. This will add a level of convenience for households that have two TVs but don't want to buy another set of Blu-ray players, set top boxes, etc. A single Blu-ray player connected to the matrix would output its movie to two screens. This is also great for retail service scapes, shopping centres, reception areas and foyers. Has support for all resolutions up to UHD 4K x 2K as well as 3D support and EDID so switching sources will be fast with minimal interruption. An IR remote control for switching sources is supplied.

Inputs: 4 x HDMI
Outputs: 2 x HDMI

- Audio support:
- 2.0CH
 - 5.1CH
 - 7.1CH
 - DTS digital
 - Dolby Digital
 - DTS-HD & Dolby TRUE HD

- Video Support:
- HDMI 1.4
 - All resolutions up to UHD 4K x 2K and 3D, 297MHz/2.97Gbps Per Channel Bandwidth
 - Supports 12 bit per channel deep colour
 - Dimensions: 85(W) x 192(D) x 26(H)mm

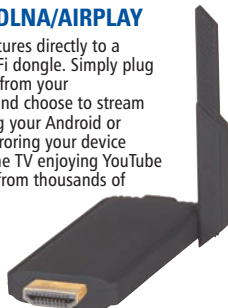
↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1714	\$129.00	\$115.95	\$102.95

1
YEAR WARRANTY

HDMI AUDIO

HDMI WI-FI DONGLE - MIRACAST/DLNA/AIRPLAY

Mirror your Android device or stream videos/pictures directly to a HDMI equipped display with this intelligent Wi-Fi dongle. Simply plug the unit into your TV and connect to it via Wi-Fi from your Smartphone/Tablet. Log into the web interface and choose to stream videos/images to the TV, essentially transforming your Android or Apple® device into a media hub for your TV. Mirroring your device allows you and your friends to lounge around the TV enjoying YouTube or other Apps together. You can also stream TV from thousands of online services for display on the big screen.



- Streams video and audio from Android or Apple® devices
- Mirror Android device to TV (Android 4.2 and above)
- Compatible with 802.11b/g/n
- Powered via USB (lead supplied)
- Dimensions: 58(L) x 28(W) x 9.8(H)mm

1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	AR-1918	\$84.95	\$76.50	\$67.95

HDMI AUDIO EXTRACTOR

Extracts the audio from HDMI and outputs to a 3.5mm socket or S/PDIF for connection to a set of speakers, home theatre audio system or amplifier. As some modern displays have less than desirable speakers, or no speakers at all, this will provide a simple way to connect audio up to a better sounding system. It supports video resolutions up to 4K x 2K and audio to 5.1CH digital. Comes with a 3.5mm to RCA audio cable.



- Input: 1 x HDMI
- Output: 1 x HDMI, 1 x 3.5mm audio socket, 1 x S/PDIF socket
- Supports video resolutions up to 4K x 2K
- HDCP support
- HDMI 1.4 compliant
- Requires no external power supply
- Dimensions: 61(L) x 54(H) x 20(H)mm

1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1741	\$84.95	\$76.50	\$67.95

HDMI TO AV COMPOSITE CONVERTER

Connect a HDMI source like a laptop or Blu-ray player to work with old CRT TV's or monitors equipped with RCA composite and stereo audio. The converter also supports either NTSC or PAL systems.

This converter provides high quality output image, and features an easy to use zoom function which allows you to adjust your display size to suit different configurations. Supports a wide range of resolutions, making it a perfect solution for using newer devices with existing legacy displays.

- Supports NTSC and PAL systems
- HDCP support
- HDMI 1.3 compliant
- Requires 5VDC power supply (included)
- Dimensions: 115(D) x 100(W) x 25(H)mm
- Input: HDMI
- Output: 1 x RCA (CBVS/Composite) and 2 x RCA (Audio L & R)

Supported input resolutions:

- 800 x 600 • 1024 x 768 • 1280 x 720 • 1280 x 1024 • 1920 x 1080



1
YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1720	\$119.00	\$106.95	\$94.95

HDMI AUDIO SIGNAL VOLUME LEVELLER

Great audio means you need the best, and with advanced HDMI repeating and decoding the HDMI Volume Leveller is the perfect choice to fine-tune your listening experience. Also helps protect your valuable home theatre equipment from annoying and equipment-damaging noise spikes. It will even sort out those annoying fluctuations in volume while channel surfing or between the TV shows themselves and the advertisements (which always seem to be louder).

- Regulates TV, satellite, radio and DVD volume
- Mains power supply included
- HDMI in/out ports
- Boosts low & high-frequency content dynamically
- Measures: 100(W) x 64(D) x 23(H)mm.



NEW
LOW
PRICE

1
YEAR WARRANTY

↑	Cat.	Qty 1+
	AC-1615	\$59.00

HDMI IN-LINE ESD PROTECTION

HDMI PORT/BUFFER PROJECTOR

An intelligent device to help protect a HDMI port against static shocks, surges and lightning strikes. It also protects HDMI 5V out in case there is accidental short to GND and spark voltage current strike.

- HDCP compliant/EDID pass through
- Dimensions: 39(H) x 20(W) x 11(D)mm



NEW
2015

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1738	\$24.95	\$22.50	\$19.95

HDMI LEADS

HDMI LEADS

BARGAIN HDMI LEAD - 1.5M

At this price, you don't have any excuse not to take advantage of HDMI in your AV system. 1.5m, HDMI Standard with Ethernet. What a bargain! Made from 99.99% pure copper, with triple layer shielding & nickel plated connectors. Supports 1080p

- HDMI 1.4 compliant

ALL HDMI HIGH SPEED WITH ETHERNET



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7914	\$9.95	\$8.75	\$7.75

ECONOMY HDMI 1.4 LEADS

HDMI leads needn't cost an arm and a leg. If your budget doesn't extend too far, these leads are a cost-effective solution without compromising quality or performance. All have gold plated connectors and have HDMI 1.4 Standard with Ethernet classification.

ALL HDMI HIGH SPEED WITH ETHERNET



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7915	\$19.95	\$17.70	\$15.70
3.0m	WV-7916	\$24.95	\$22.35	\$19.70
5.0m	WV-7917	\$39.95	\$35.90	\$31.90

HIGH QUALITY HDMI 2.0 CABLES

These are our premium HDMI 2.0 High Speed with Ethernet cables. They feature heavily plated 24K gold plated connectors and oxygen-free heavy copper cabling. Each plug is solidly constructed for frequent, reliable use. Also featured are high quality moulded strain-relief cord grommets and a braided sheath to protect against wear. They don't have magical properties, but what you put in one end will come out the other...and that's all you need them to do.

- HDMI High Speed with Ethernet
- Male to male.

CONCORD



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WQ-7906	\$24.95	\$22.35	\$19.70
1.5m	WQ-7900	\$29.95	\$26.90	\$23.70
3.0m	WQ-7902	\$39.95	\$35.90	\$31.90
5.0m	WQ-7904	\$49.95	\$44.90	\$39.90
10m	WQ-7905	\$79.95	\$71.95	\$63.95

HDMI PLUG TO TYPE C HDMI PLUG

Type A plug to Type C or 'Mini' HDMI plug cable for connection to portable HDMI devices.

- Gold plated shield
- 24K gold contacts
- Internal dual strain relief
- Triple shielded
- Nitrogen gas injected dielectric
- RoHS & HDMI v1.3 compliant

CONCORD



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
3.0m	WQ-7412	\$34.95	\$31.45	\$27.90

AMPLIFIED HDMI LEADS

After about 5 metres HDMI signals tend to degrade. Pixels get missed and you may notice artefacts known as 'sparkles' on your TV when the receiving unit simply can't re-assemble the digital data correctly. These amplified HDMI leads overcome this limitation allowing you much longer HDMI cable runs for home or AV setups in bars, foyers, etc. They accomplish this feat with a built-in equaliser that boosts signal strength.

NEW 2015



CONCORD



- Powered from the HDMI port
- HDMI High Speed with Ethernet
- HDMI 1.4 Compatible

Length	Cat.	Qty 1+	Qty 4+	Qty 10+
10m	WQ-7430	\$79.95	\$71.95	\$63.95
15m	WQ-7432	\$99.95	\$89.95	\$79.95
20m	WQ-7434	\$129.00	\$115.95	\$102.95
30m	WQ-7436	\$149.00	\$133.95	\$118.95

HDMI LEAD WITH ROTATING PLUGS

HDMI cable with a difference - the plug on each end of the cable rotates through 180° to accommodate whatever installation challenge you have.

- 1.5m length
- HDMI 1.3 compliant



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7401	\$14.95	\$13.35	\$11.70

HDMI RETRACTABLE LEAD & TRAVEL KIT

HDMI RETRACTABLE LEAD

This HDMI cable retracts for taking on-the-go or when put in storage.

- ATC certified
- Ultra fast signal
- Ethernet channel
- Pure digital connection
- Advanced technology connection
- 1.3m length



NEW LOW PRICE

Length	Cat.	Qty 1+
HDMI Plug to HDMI D Plug 1.3m	WC-7744	\$9.95

HDMI MULTIMEDIA TRAVEL KIT

A handy HDMI travel kit for connecting Tablets, Smartphones, cameras, or laptops to displays with HDMI ports. The kit consists of a standard 1.2m HDMI lead and two adaptors to convert one end of the lead to either a Mini HDMI or Micro HDMI plug. Includes a travel pouch for your lead and adaptors as well as a pouch for a Smartphone or camera.

- 24K Gold Plated Connectors
- 1.2m HDMI lead
- HDMI 1.4 compatible
- HDMI High Speed (10.2Gbps) with Ethernet
- Mini HDMI Adaptor: Mini HDMI Male (Type A) to HDMI Female (Type A)
- Micro HDMI Adaptor: Micro HDMI Male (Type D) to HDMI Female (Type A)
- Resolution up to 4092 x 2160 pixels
- 48-bit colour and full HD 3D support
- Supports Dolby 7.1



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	WC-7746	\$24.95	\$22.35	\$19.70

LET'S FIND EVERYTHING YOU NEED!

FROM \$9.95 PA-3649



HDMI ADAPTORS

P419

FROM \$6.95 PS-0295



RECESSED WALL PLATES

P408

FROM \$139.00 AR-1914



HDMI TO TV CONVERTER

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FROM \$74.95 AC-1730



HDMI EXTENDERS

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LET'S POINT YOU TO THE RIGHT PAGE...

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DVR & CAMERA KITS - ECONOMY RANGE

ECONOMY NETWORK 4 CHANNEL DVR KIT WITH 4 CAMERAS

Price breakthrough! An affordable 4 channel DVR suitable for day and night surveillance. Includes 500GB of storage for up to 300 hours of continuous video recording from the four 420TV line weatherproof colour cameras with IR illumination. The four channel DVR supports full D1 resolution at 25 frames per second on each channel and can be controlled across the network or by using the included mouse or remote control. Recordings can be initiated manually, triggered by a timer or activated by movement in the cameras field of vision. Connect the DVR to a computer network and you can even view video remotely from anywhere using a web browser or Smartphone /iPhone® (via installed app*). Free app for viewing live video available for download.

Camera Cables

- Cable type: Combination video and power
- Cable length: 18m

View live footage
on a Smartphone



DVR Specifications	QV-3048
Video compression	H.264
Video input	4 x BNC composite
Video output	HDMI, VGA, 2 x BNC Composite,
Audio input	1 x RCA
Audio output	1 x RCA
Max recording resolution	704 x 576 (D1) at 25fps per channel
Max recording frame rate	100fps
Hard disk storage	500GB SATA
Back-up	USB & network remote back-up
Network interface	RJ45, 10/100Mbps
Power supply	12VDC 5A (included)
Dimensions	255(L) x 185(W) x 50(H)mm

Camera Specifications	
Sensor	1/3" CMOS
Horizontal resolution	420TV Lines
Lens type A (2 cameras)	3.6mm lens, 72° angle
Lens type B (2 cameras)	6.0mm lens, 45° angle
Size	85(L) x 45(Dia.)mm
Voltage	12VDC from DVR power supply

FEATURES



New & Improved
Plug & Play

NEW
LOW
PRICE



↑	Cat.	Qty 1 +
4 Channel DVR & 4 x 420TVL Camera Kit	QV-3048	\$349.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$59.95
QC-3239



OUTDOOR CAMERA TO SUIT QV-3048

P434

FROM
\$64.95
QC-8635



DOME CAMERA TO SUIT QV-3048

P434

FROM
\$19.95
WQ-7279



CCTV VIDEO & POWER CABLE - 18M

P438

NETWORK DVR & CAMERA KITS

DVR & CAMERA KIT COMPARISON

A range of TECHview DVR Camera Kits suitable for Home and Office applications. Each model has network access so camera vision can be viewed across a network or over the Internet using a web browser or Smartphone with a freely available app. Video is compressed using H.264 (also known as MPEG-4 AVC), which provides great picture quality at an efficient file size so you can get more video footage on your hard drive than both MPEG-2 and MPEG-4 compression. The kits are supplied in attractive packaging with carry handles.



Cat No.	Channels	Cameras	DVR Type	Camera Type	Camera TV Lines	Hard Drive	Page
QV-3048	4	4	D1	CMOS	420TVL	500GB	425
QV-3032	4	4	D1	CMOS	600TVL	500GB	426
QV-3130	4	2	Wi-Fi 720p	CMOS	720p	500GB	430
QV-3142	4	4	AHD 720p	AHD CMOS	720p	1TB	428
QV-3144	8	4	D1	CMOS	600TVL	1TB	427
QV-3145	8	8	D1	CMOS	600TVL	1TB	427
QV-3146	8	4	AHD 720p	AHD CMOS	720p	1TB	428
QV-3148	16	4	AHD 720p	AHD CMOS	720p	1TB	429

DVR & CAMERA KITS - ECONOMY RANGE (CONTINUED)

NETWORK 4 CHANNEL DVR KIT WITH 4 HIGH RESOLUTION CAMERAS

Suitable for home, office, and retail shops this kit includes a DVR, cameras, cables and power supply to give you all the necessary parts for a surveillance installation. Designed for locations which require superior video quality, the kit includes high grade cameras and a 4 channel DVR with additional features not found in economy DVR kits.

The CMOS cameras output high quality 600TV line video signals have 24 infrared LEDs to give longer range night vision and include IR cut filter to give improved colour reproduction under normal light. The DVR features include recording of full D1 resolution from all 4 camera inputs, multiple outputs for local viewing, and an Ethernet connection which can be configured for remote viewing. It is also capable of accepting alarm trigger signals from separate sensors or an existing alarm system and can record 4 audio channels. Supplied with 500GB of storage capable of recording up to 300 hours of continuous video, it also has USB support for backup to thumb drive or portable hard drive (not included). By connecting the DVR to your computer network, video can also be viewed remotely via using a web browser or iPhone®/Smartphone application*.

* Free app available for viewing live video. Application based searching and backup requires advanced version at an additional cost.

View live footage on a Smartphone

NEW LOW PRICE



New & Improved Plug & Play



DVR Specifications	QV-3032
Video compression format	H.264
Video input	4 channels composite
Video output	HDMI, Composite video, VGA
Minimum recording resolution	352 x 288 (CIF)
Maximum recording resolution	704 x 576 (D1) at 25fps per channel, 960 x 576 (960H)
Maximum recording frame rate	100fps
Hard disk storage	500GB SATA
Back-up	USB & network remote back-up
Network interface	RJ45, 10/100Mbps
Power supply	12VDC 2A (included)
Dimensions	300(W) x 220(D) x 50(H)mm

Camera Specifications	
Sensor	1/3" CMOS
Sensor resolution (H x V pixels)	792 x 698
Horizontal resolution	600TVL
Minimum illumination	0.05Lux
IR illumination	24 LEDs
Effective IR range	Up to 10 metres
Lens type A (2 cameras)	3.6mm lens, 72° angle
Lens type B (2 cameras)	6mm lens, 45° angle
IP rating	IP66
Power source	12VDC
Current draw	35mA (IR OFF), 180mA (IR ON)
Dimensions	135(L) x 85(H) x 68(W)mm

FEATURES



↑	Cat.	Qty 1 +
4 Channel DVR & 4 x 600TVL Camera Kit	QV-3032	\$499.00

CAMERAS TO SUIT

600TVL CMOS CAMERAS WITH IR ILLUMINATION

Robust high resolution security cameras suitable for shopping centres, banks, schools, hotels, etc. Available in a weatherproof black anodised case or a neat indoor dome they feature a high quality colour CMOS sensor and IR LEDs for night time illumination. With a composite video output for easy integration into existing surveillance setups it is also supplied with a suitable power supply and 18m combined video and power lead.

Specifications	
Sensor	1/3" CMOS
Sensor resolution (H x V pixels)	792 x 698
Horizontal resolution	600TVL
Minimum illumination	0.05Lux
IR illumination	24 LEDs
Effective IR range	Up to 10 metres
Lens	6mm / F2.0
Lens angle	45°
Power requirement	12VDC
Current draw	35mA (IR OFF), 180mA (IR ON)

OUTDOOR CAMERA

- IP rating: IP66
- Dimensions: 135(L) x 85(H) x 68(W)mm
- Cat. QC-8632

CMOS DOME CAMERA

- Dimensions: 110(Dia) x 85(H)mm
- Cat. QC-8633



FEATURES



↑	Type	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
600TVL	Bullet	QC-8632	\$99.95	\$89.95	\$84.95
600TVL	Dome	QC-8633	\$99.95	\$89.95	\$84.95

ECONOMY RANGE DVR & CAMERA KITS - ECONOMY RANGE (CONTINUED)

NETWORK 8 CHANNEL DVR WITH 600TVL CAMERAS - H.264/960H

These digital video recorders feature an embedded Linux operation System and H.264 compression. Recording resolution up to 960H will capture all the details. Supports Pelco PTZ control, and it can be viewed using a Smartphone or iOS® devices, and is supplied with remote PC Viewing Software. The P2P feature allows automated connection of network settings for remote viewing applications via a simple App download and QR code scanner. Back-up video event recordings to a thumb drive (not included), or remotely.

- Features motion detection and event notification via email
- Packages include power supply, software and a USB mouse.

Two models available:

DVR Specifications	QV-3144	QV-3145
Video Compression	H.264	H.264
Operating System	Linux (embedded)	Linux (embedded)
Video - input / output	8 CH inputs (BNC) / 1 CH (BNC),VGA and HDMI outputs	8 CH inputs (BNC) / 1 CH (BNC),VGA and HDMI outputs
Audio - input / output	4 Channel inputs / 1 Channel output (RCA)	4 Channel inputs / 1 Channel output (RCA)
Display Resolution	1280 x 720p or 960 X 576 / 25fps per CH = 100fps total	960 X 576 / 25fps per CH = 100fps total
Record Resolution	480 x 288(WCIF), 960 x 288(WHD1), 960x576(WD1), 360 x 288(CIF), 720 x 576(D1), 960 x 576 (960H)	480 x 288(WCIF), 960 x 288(WHD1), 960x576(WD1), 360 x 288(CIF), 720 x 576(D1), 960 x 576 (960H)
Record Speed	D1/HD1/CIF:25fps/ch; WD1:10fps/ch, WHD1:20fps/ch,WCIF:25fps/ch	D1/HD1/CIF:25FPS/CH; WD1:10fps/ch, WHD1:20fps/ch,WCIF:25FPS/CH
Notifications	Email	Email
Hard Disk Storage	1TB SATA, supports up to 4TB	1TB SATA, supports up to 4TB
Back-up	USB and network remote back-up	USB and network remote back-up
Network interface	RJ45 10/100Mbps (DHCP and DDNS)	RJ45 10/100Mbps (DHCP and DDNS)
PTZ Control	Built in RS485, support Pelco-P & Pelco-D	Built in RS485, support Pelco-P & Pelco-D
Camera Specifications	QV-3144	QV-3145
Image Sensor	1/3" colour CMOS	1/3 colour CMOS
Effective Pixels	792 (H) x 698 (V)	792 (H) x 698 (V)
Horizontal Resolution	600TVL	600TVL
Electronic Shutter	1/50 - 1/100,000 Sec	1/50 - 1/100,000 Sec
Lens	3.6mm /6.0mm	3.6mm /6.0mm
Min Illumination	0 Lux (F: 2.0) with IR on	0 Lux (F: 2.0) with IR on
Video Output	1 channel BNC	1 channel BNC
Day / Night	IR cut	IR cut
IR Type	24 IR LEDs	24 IR LEDs
IR Range	15m	15m
Power Requirement	12VDC	12VDC



View live footage on a Smartphone



FEATURES



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
8 Channel DVR & 4 x 600TVL Cameras	QV-3144	\$599.00	\$539.00	\$479.00
8 Channel DVR & 8 x 600TVL Cameras	QV-3145	\$799.00	\$719.00	\$679.00

ICONS SHOWN ON THESE PAGES...

When the following icons appear on a product, they give a quick reference / snapshot of the features of the product.



Number of Camera TVL



High Definition Recording



Wireless Range Line of Sight



Quad Screen Display



Mouse Included



USB Connection



CCD Sensor



Recording Resolution



Wi Fi Enabled



Remote Viewing



Remote Control



HDMI Connection



CMOS Sensor



Recording Resolution



Size of Hard Drive



Motion Trigger Recording



DIY Easy Installation



TV Out



Sony Sensor



H.264 Compression



Infrared Night Vision



Hidden Camera



Weatherproof Camera



Supports SD Cards

NETWORK DVR & CAMERA KITS

DVR & CAMERA KITS WITH AHD TECHNOLOGY - PREMIUM RANGE

WHAT IS AHD?

AHD (Analogue High Definition) is a new HD solution, AHD technology can transmit video signal over traditional coaxial cable up to 500 metres.

It adopts advanced Y/C signal separation and analogue signal filtering technology, which can effectively reduce colour noise, and with better image reproduction.

AHD cameras advantages:

- High resolution: Advanced signal filtering, 3D noise reduction, higher image resolution, better image reproduction.
- Long range transmission distance: max. 500 metres over traditional 75Ω coaxial cable.
- No video latency: Uncompressed video, real time transmitting
- Better compatibility: Compatible with D1/960H products.
- Easy to install: Support OSD menu, easy to operate and install

NETWORK 4 CHANNEL AHD DVR KIT WITH 4 X 720p CAMERAS

This digital video recorder features the newly developed solution AHD (Analogue High Definition) for transmitting full HD digital video in a surveillance system. The core concept of AHD is to deliver high definition video using digital TV (DTV) transmission and can be transmitted easily over coaxial cables up to 500m. This package includes 4 x 720p high definition cameras with real time recording for crystal clear images. Coupled with P2P connectivity means that is simpler than ever to connect your DVR to your iOS® or Smartphone device than ever before. Simply download the app using the QR Code link in the manual. Connect your DVR to your broadband router. Scan the QR code on the DVR using the App, and you are connected. Now you can view your home or office cameras remotely. Record continuously on all 4 channels in 720p high definition, or select motion event recording to maximise storage performance.

- Motion event recording can also be set to alert you via email or push notification.

KIT INCLUDES:

- Camera connection cables, power supplies & USB mouse.

DVR Specifications	QV-3142
Video Compression	H.264
Video - input / output	4 Channel inputs / VGA and HDMI outputs
Audio - input / output	4 Channel inputs / 1 Channel output (RCA)
Display / Record resolution	1280 x 720p or 960 X 576 / 25fps
Sensor and alarm I/O	4 inputs / 1 output
Hard Disk Storage	1TB SATA, supports up to 4TB
Back-up	USB and network remote back-up
Network interface	RJ45 10/100Mbps (DHCP and DDNS)
PTZ Control	Supported
Dimensions	300(W) x 227(D) x 53(H)mm

Camera Specifications	
Image Sensor	1.0 Megapixel, 1/4" CMOS
Effective Pixels	1280 (H) x 720 (V) - 720p @ 25fps
Lens	3.6mm/6.0mm
IP Rating	IP66
Min Illumination	0.05 Lux with IR
Video Output	1 channel BNC
Day / Night	IR cut
IR Type	30 IR LEDs
IR Range	10m
Power Requirement	12VDC

View live footage on a Smartphone



NEW 2015

Plug-2-Play. For an easier way to connect the DVR to your Smartphone

1 YEAR WARRANTY

FEATURES



	Cat.	Qty 1+	Qty 2+	Qty 4+
4 Channel AHD DVR & 4 x 720p Camera Kit	QV-3142	\$699.00	\$629.00	\$559.00

NETWORK 8 CHANNEL AHD DVR WITH 4 X 720p CAMERAS

This 8 channel DVR features 4 x real time 720p high definition cameras. Compared with traditional analogue cameras AHD technology has significant improvement on imaging coupled with P2P connectivity means that is simpler than ever to connect your DVR to your iOS® or Smartphone device than ever before. Simply download the app using the QR Code link in the manual. Connect your DVR to your broadband Router (Required). Scan the QR code on the DVR using the App, and you are connected. Now you can view your home or office cameras remotely. Record continuously on all 8 channels in 720p high definition, or select motion event recording to maximise storage performance. Motion event recording can also be set to alert you via email or push notification.

KIT INCLUDES:

- 1 x 8CH DVR, 4 x 720p cameras, connection cables, power supplies and USB mouse.

DVR Specifications	QV-3146
Video Compression	H.264
Operating System	Linux (embedded)
Video - input / output	4 Channel inputs / VGA and HDMI outputs
Audio - input / output	4 Channel inputs / 1 Channel output (RCA)
Display / Record resolution	1280 x 720p or 960 X 576 / 25fps
Sensor and alarm I/O	4 inputs / 1 output
Hard Disk Storage	1TB SATA, supports up to 4TB
Back-up	USB and network remote back-up
Network interface	RJ45 10/100Mbps (DHCP and DDNS)
PTZ Control	Supported
Dimensions	300(W) x 227(D) x 53(H)mm

Camera Specifications	
Image Sensor	1.0 Megapixel, 1/4" CMOS
Effective Pixels	1280 (H) x 720 (V) - 720p @ 25fps
Lens	3.6mm / 6.0mm
IP Rating	IP66
Min Illumination	0.05 Lux with IR
Video Output	1 channel BNC
Day / Night	IR cut
IR Type	30 IR LEDs
IR Range	10m
Power Requirement	12VDC

View live footage on a Smartphone



NEW 2015

Plug-2-Play. For an easier way to connect the DVR to your Smartphone

1 YEAR WARRANTY

FEATURES



	Cat.	Qty 1+	Qty 2+	Qty 4+
8 Channel AHD DVR & 4 x 720p Camera Kit	QV-3146	\$849.00	\$765.00	\$719.00

DVR & CAMERA KITS WITH AHD TECHNOLOGY - PREMIUM RANGE (CONTINUED)

NETWORK 16 CHANNEL AHD DVR WITH 4 X 720p CAMERAS

This 16 CH DVR incorporates AHD technology which can transmit 720p high definition video signal over traditional coaxial cable up to 500 metres; it adopts advanced Y/C signal separation and analogue signal filtering technology, which can effectively reduce colour noise, and with better image reproduction. Compared with traditional analogue cameras, AHD technology has significant improvement on imaging. Unlike IP Cameras AHD cameras transmit data that is not encoded resulting in no process and no delay real time and complete transmission.

Coupled with P2P connectivity means that is simpler than ever to connect your DVR to your iOS® or Smartphone device than ever before. Simply download the app using the QR Code link in the manual. Connect your DVR to your broadband Router(Required). Scan the QR code on the DVR using the App, and you are connected. Now you can view your home or office cameras remotely. Record continuously on all 8 channels in 720p high definition, or select motion event recording to maximise storage performance. Motion event recording can also be set to alert you via email or push notification.

AHD cameras advantages:

- High resolution: Advanced signal filtering, 3D noise reduction, higher image resolution,
- Long range transmission distance: max. 500 metres over traditional 75-3 coaxial cable.
- No video latency: Uncompressed video, real time transmitting
- Better compatibility: Compatible with D1/960H products.
- Easy to install: Support OSD menu, easy to operate and install

KIT INCLUDES:

- 1 x 8CH DVR, 4 x 720p cameras, connection cables, power supplies & USB mouse.



View live footage on a Smartphone

Plug-2-Play. For an easier way to connect the DVR to your Smartphone

DVR Specifications	QV-3148
Video Compression	H.264
Operating System	Linux (embedded)
Video - input / output	4 Channel inputs / VGA and HDMI outputs
Audio - input / output	4 Channel inputs / 1 Channel output (RCA)
Display / Record resolution	1280 x 720p or 960 X 576 / 25fps
Sensor and alarm I/O	4 inputs / 1 output
Hard Disk Storage	1TB SATA, supports up to 4TB
Back-up	USB and network remote back-up
Network interface	RJ45 10/100Mbps (DHCP and DDNS)
PTZ Control	Supported
Dimensions	300(W) x 227(D) x 53(H)mm

Camera Specifications	
Image Sensor	1.0 Megapixel, 1/4" CMOS
Effective Pixels	1280 (H) x 720 (V) - 720p @ 25fps
Electronic Shutter	1/25 - 1/10,000 Sec
Lens	3.6mm / 6.0mm
IP Rating	IP66
Min Illumination	0.05 Lux with IR
Video Output	1 channel BNC
Day / Night	IR cut
IR Type	30 IR LEDs
IR Range	10m
Power Requirement	12VDC

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
16 Channel AHD DVR & 4 x 720p Camera Kit	QV-3148	\$1,049.00	\$945.00	\$889.00

TECH TALK!

HOW 720p & 1080p ARE SIMILAR & DIFFERENT

Contrary to what some may believe, 720p and 1080p are actually both high definition video display formats. In addition, the other characteristic 1080p and 720p share in common is that they are progressive display formats (that is where the "p" comes from). However, this is where the similarity between 720p and 1080p ends.

720p

720p refers to a progressive HDTV signal with 720 horizontal lines and an Aspect Ratio (AR) of 16:9 (1.78:1). All major HDTV broadcasting standards include a 720p format which has a resolution of 1280x720, however there are other formats, including HDTV and AVCHD for camcorders, which utilize 720p images with the standard HDTV resolution.

1080p

1080p refers to a progressive HDTV signal with 1080 horizontal lines and an Aspect Ratio of 16:9 (1.78:1). All major HDTV broadcasting standards include a 1080i format which has a resolution of 1920x1080, but the progressive HDTV broadcast standards in place right now only allow a resolution of 1280x720 (720p).

The main difference between 720p and 1080p lies in the number of pixels that make up a 720p image and 1080p image. For 720p the number of pixels that make up the image is about 1 million (equivalent to 1 megapixel in a digital still camera) and about 2 million pixels for 1080p. This means that a 1080p image has the potential to display a lot more detail than a 720p image.

Both these formats provide added clarity and detail for CCTV applications and with the introduction of HD capable DVRs these cameras producing video in these formats shows another advance in CCTV technology.

CAMERAS TO SUIT

720p AHD OUTDOOR BULLET CAMERA WITH IR

Capture your surroundings with this bullet high definition camera. Featuring the latest AHD (Analogue High Definition) technology, this camera deliver crystal clear images. Backward compatible with standard analogue equipment such as DVRs, video splitters, video balun, etc. Supplied with power supply and 18 metre coaxial cable fitted with BNC connectors.

NEW 2015

Specifications	QC-8637
Image Sensor	1.0 Megapixel, 1/4" CMOS
Effective Pixels	1280 (H) x 720 (V) 720p
Electronic Shutter	1/25 - 1/10,000 Sec
Video Frame Rate	720p @ 25fps (PAL)
Lens	3.6mm
IP Rating	IP66
Min Illumination	0.05 Lux with IR
Video Output	1 channel BNC
Day / Night	IR cut
IR Type	30 IR LEDs
IR Range	10m
Power Requirement	12VDC
Recommended Power Supply	MP-3011

FEATURES



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p Bullet	QC-8637	\$149.00	\$133.95	\$129.00

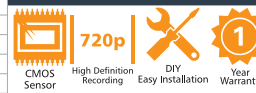
720p AHD DOME CAMERA WITH IR

Capture your surroundings with this bullet dome high definition camera. Featuring the latest AHD (Analogue High Definition) technology, this camera deliver crystal clear images. Backward compatible with standard analogue equipment such as DVRs, video splitters, video balun, etc. Supplied with power supply and 18 metre coaxial cable fitted with BNC connectors.

NEW 2015

Specifications	QC-8639
Image Sensor	1.0 Megapixel, 1/4" CMOS
Effective Pixels	1280 (H) x 720 (V) 720p
Electronic Shutter	1/25 - 1/10,000 Sec
Video Frame Rate	720p @ 25fps (PAL)
Lens	3.6mm
IP Rating	IP66
Min Illumination	0.05 Lux with IR
Video Output	1 channel BNC
Day / Night	IR cut
IR Type	30 IR LEDs
IR Range	10m
Power Requirement	DC12V
Recommended Power Supply	MP-3011

FEATURES



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p Dome	QC-8639	\$149.00	\$133.95	\$129.00

NETWORK DVR & CAMERA KITS

NVR & CAMERA KITS - PREMIUM RANGE

NETWORK 4 CHANNEL WI-FI NVR WITH 2 X 720p CAMERA KIT

This easy to use Wi-Fi network video recorder package ensures this model is the number one choice for installers and amateurs alike. The supplied two weatherproof 720p HD IP digital cameras provide crisp and clear images enabling the recording of faces, clothing colours, license plates and more all in high definition. Each camera has 24 infrared LEDs which automatically turn on in low light conditions and enable recording to continue in absolute darkness. Supplied with a 500GB HDD for recording up to 300hrs of continuous video. Backup a recorded incident easily and quickly to a USB flash drive.

With the incorporated plug-and-play technology this NVR kit is the easiest video security product to setup. View live footage on your Smartphone or Tablet in minutes. Unlike traditional digital video recorders (DVRs) there is no specialised IT technical expertise required during installation. No router setup required, no port forwarding to be done, a static IP address is not required from your internet service provider. All of this highly technical expertise is simply not needed to install this NVR kit, making it a breakthrough in technology, and one of the easiest to install Smartphone connect security recording product ever.

Camera Features:

- 1.0 Megapixel CMOS Sensor
- 4.0mm Lens
- 36 Infrared LED light, 20m Range
- H.264 Compression Format
- Support P2P, Video Push
- Transmission up to 15FPS/2MP

NVR Specifications	QV-3130
Video Compression	H.264
Camera Input	IP x 4CH (RJ45) 720P/D1
Video Output	HDMI, CVBS, VGA
Network Interface	NTP/DHCP/DDNS/CMS/Web2.0 Browser/P2P/WiFi
Hard Disk Storage	500GB HDD
Back-up	USB and network remote Back-up

Camera Specifications	QC-3131
Effective Pixels	1280 x 720 - 1.0MP
Illumination Colour	0.5 LUX(IR ON)
Lens	4.0mm
Viewing Angle	Horizontal 65°/45°/25°/15°
Linux System	Internal Linux system
Day/Night IR distance	20m
S/N Ratio	>50 dB
Picture Resolution	Main Flow: 1920 x 1080@15fps, Minor Flow: 640 x 360@10fps, 320 x 180@10fps
Software	Web Browser above Internet Explorer 6, Mobile phone, iPhone®, Android®
Power Consumption	12VDC, 0.5A
Dimensions	290(L) x 80(W) x 80(H)mm



FEATURES



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
4 Channel NVR & 2 x 720p Camera Kit	QV-3130	\$399.00	\$359.00	\$339.00
Spare 720p Camera to Suit	QC-3131	\$129.00	\$115.95	\$109.95

SURVEILLANCE MONITOR

17" LED SURVEILLANCE MONITOR

High resolution slimline monitor suitable for surveillance applications. Ideal for use with our range of DVR camera kits. Its 4:3 aspect ratio that means the camera vision won't appear distorted or stretched, unlike 16:9 monitors.

Specifications	QM-3578
Panel Size	17.0
Resolution	1280x1024
Brightness (Max.)	250 cd
Contrast Ratio (Max.)	1000:1
Smart Contrast Ratio(ASCR)	50000000:1
Display Colours	16.7M
Response Time	5ms
Input	HDMI, VGA, BNC x 1
Dimensions	378(W) x 315(H) x 62(D)mm

WHY SO EXPENSIVE?

We agree! EXCEPT that none of the big manufacturers want to make 4:3 aspect ratio (ie: "Surveillance") any more. You can buy 16:9 monitors cheaper, but they are useless for surveillance applications. Indeed, we're lucky to get 4:3 monitors at all!



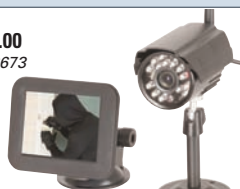
FOR OTHER MONITORS SEE PAGE 440



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
17" Surveillance Monitor	QM-3578	\$249.00	\$225.00	\$209.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$139.00
QC-3673



WIRELESS LCD CAMERA KIT P441

FROM
\$99.95
QC-3368



IP CAMERAS P447

FROM
\$89.95
QC-8070



COVERT CAMERAS P448

FROM
\$229.00
QC-8030



TIMELAPSE CAMERAS P445

STAND ALONE DVR COMPARISON CHART

Specifications	QV-3049	QV-3143	QV-3147	QV-3149	QV-8126	QV-8128
Video Input	4 Channels BNC	4 Channels BNC	8 Channels BNC	16 Channels BNC	8 Channels BNC	16 Channels BNC
Video Output	HDMI, VGA, 1 x BNC	HDMI, VGA	HDMI, VGA	HDMI, VGA	HDMI, VGA, 1 x BNC	HDMI, VGA, 1 x BNC
Audio Input	4	4	8	16	1	1
Audio Output	1	1	1	4	1	1
Alarm Input	N/A	4	8	8	1	1
Alarm Output	N/A	1	1	1	1	1
USB Input	2	2	2	2	2	2
Maximum Resolution	704 x 576 (D1)	1280 x 720 (720p)	1280 x 720 (720p)	1280 x 720 (720p)	960 x 576 (960H)	960 x 576 (960H)
Maximum Frame Rate	25fps @ D1	25fps @ 720p	25fps @ 720p	25fps @ 720p	25fps @ 960H	25fps @ 960H
Hard Disk Storage	500GB	1TB	1TB	1TB	Supports 2 (1TB Included)	Supports 2 (1TB Included)
Hard Disk Support	Up to 4TB	Up to 4TB	Up to 4TB	Up to 4TB	Up to 4TB	Up to 4TB
Network Interface	RJ-45 10/100Mbps	RJ-45 10/100Mbps	RJ-45 10/100Mbps	RJ-45 10/100Mbps	RJ-45 10/100Mbps	RJ-45 10/100Mbps
Back-up USB or Network	Both	Both	Both	Both	Both	Both
Dimensions	300(L) x 210(W) x 50(H)mm	300(L) x 227(W) x 53(H)mm	300(L) x 227(W) x 53(H)mm	300(L) x 227(W) x 53(H)mm	445(L) x 290(W) x 45(H)mm	445(L) x 290(W) x 45(H)mm

* DMSS remote access app available for iOS®, Android™, BlackBerry®, Symbian®, and Windows Mobile® operating systems. See our website for more information.

STAND ALONE DVRs - ECONOMY

ECONOMY 4 CHANNEL DIGITAL VIDEO RECORDER

An affordable 4 channel DVR suitable for home or office surveillance. Includes 500GB of storage for up to 300 hours of continuous video recording from up to 4 cameras available separately. Supports full D1 resolution at 25 frames per second on each channel and can be controlled across the network or by using the included mouse or remote control. Recordings can be initiated manually, triggered by a timer or activated by movement in the camera's field of vision. Connect the DVR to a computer network and you can even view video remotely from anywhere in the world using a web browser or Smartphone/iPhone® (via installed app*).

* Free app for viewing live video available for download.

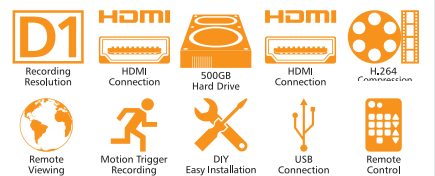
DVR Specifications	QV-3049
Video compression	H.264
Video input	4 x BNC composite
Video output	HDMI, VGA, 2 x BNC Composite,
Audio input	1 x RCA
Audio output	1 x RCA
Maximum recording resolution	704 x 576 (D1) at 25fps per channel
Maximum recording frame rate	100fps
Hard disk storage	500GB SATA
Back-up	USB & network remote back-up
Network interface	RJ45, 10/100Mbps
Power supply	12VDC 2A (included)
Dimensions	300(L) x 210(W) x 50(H)mm

View live footage on a Smartphone

Plug-2-Play. For an easier way to connect the DVR to your Smartphone



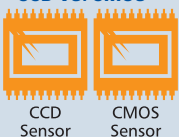
FEATURES



↑	Cat.	Qty 1 +
Economy 4 Channel Stand Alone DVR	QV-3049	\$249.00

TECH TALK!

CCD VS. CMOS



CCD Sensors have been used in cameras for more than 20 years, and provide greater light sensitivity which results in better image quality when compared to CMOS sensors. Whilst the number of TV lines of a CMOS and CCD camera might be similar, this does not necessarily mean that they will have a similar image quality. In low light conditions the image difference between CMOS and CCD is particularly noticeable. CCD Sensors are more expensive, and more complex to integrate into a camera.

Recent advances have brought CMOS sensors closer in performance to CCD sensors however their lower light sensitivity remains their most noticeable limitation.

The SONY Ex View HAD II with Effio DSP solution has the best and clearest picture quality of any camera we currently sell. It most noticeably demonstrates the gulf in the light sensitivity and hence picture quality that exists between CCD and CMOS sensors.

CAMERAS TO SUIT

CMOS CAMERAS WITH IR ILLUMINATION

Versatile economical CMOS surveillance cameras with IR illumination, designed for quick and easy installation in domestic and small business surveillance systems. Available as indoor dome or outdoor weatherproof models, both versions are suitable for use on stand-alone monitors or as an additional camera for a DVR system. Supplied with power supply and combined video and power cable with standard BNC and 2.1mm DC connections.

Specifications	QC-3239 / QC-8635
Resolution	420TV lines (Bullet) 380TV lines (Dome)
Operation	Day/night
Lens	6.0mm/45°
Power requirements	12VDC
Current draw	300mA
Cable Length	18m

OUTDOOR CAMERA

• Dimensions: 85(L) x 58(Dia)mm
Cat. QC-3239

DOME CAMERA

• Dimensions: 100(Dia) x 70(H)mm
Cat. QC-8635



FEATURES



↑	Type	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
420TVL	Bullet	QC-3239	\$59.95	\$53.95	\$47.90
380TVL	Dome	QC-8635	\$64.95	\$58.50	\$54.95

NETWORK DVRS

STAND ALONE DVR RANGE WITH AHD TECHNOLOGY

NETWORK 4 CHANNEL AHD DVR

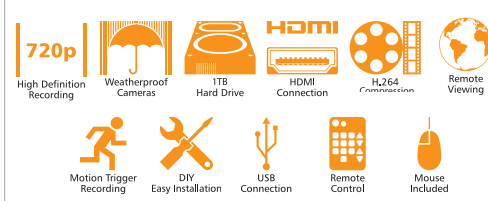
This 4 channel DVR is suitable for either home or office applications and features the latest AHD (Analogue High Definition) recording. Built on a robust Linux operating system, it features P2P connectivity that provides easy network configuration which makes iOS® or Smartphone remote viewing applications a breeze to connect. Recording on all 4 channels in 720P real time high definition, it incorporates a multiplexer to allow simultaneous recording and playback of stored video. Alarm inputs allows for contact triggered events such as a forced door or window or duress switch activation to initiate an event recording and email notification to be sent.

- Remote connection software supplied with the DVR allows remote playback and setting of the DVR. Via access passwords, multi-user access to monitor and review footage can be achieved.



Specifications	QV-3143
Video Compression	H.264
Video - input / output	4 Channel inputs / VGA and HDMI outputs
Audio - input / output	4 Channel inputs / 1 Channel output (RCA)
Display / Record resolution	1280 x 720p or 960 X 576 / 25fps
Sensor and alarm I/O	4 inputs / 1 output
Hard Disk Storage	1TB SATA, supports up to 4TB
Back-up	USB and network remote back-up
Network interface	RJ45 10/100Mbps (DHCP and DDNS)
PTZ Control	Built in RS485, support Pelco-P & Pelco-D IR
IR Extender	1 port
Dimensions	300(W) x 227(D) x 53(H)mm

FEATURES



View live footage on a Smartphone

Plug-2-Play. For an easier way to connect the DVR to your Smartphone



	Cat.	Qty 1+	Qty 2+	Qty 4+
4 Channel AHD Stand Alone DVR	QV-3143	\$399.00	\$359.00	\$339.00

NETWORK 8 & 16 CHANNEL AHD DVRS

AHD stands for Analogue High Definition, which is a new HD analogue solution that supports video transmission over traditional coaxial cable up to 500 metres. Our exciting new range of 8 channels (QV-3147) and 16 channels (QV-3149) AHD DVRs support monitors with VGA or HDMI input, include a 1TB HDD, and features an advanced user interface with user friendly design and intuitive user controls.

- Each DVR can connect to a wired network so you can see what is going on from anywhere in the world via your iOS® or Android® Smartphone or Tablet. Package includes DVR, mains power adaptor and mouse.



Specifications	QV-3147	QV-3149
Video Compression	H.264	H.264
Operation System	Linux (embedded)	Linux(embedded)
Storage	1TB HDD included, supports up to 4TB	1TB HDD included, supports up to 4TB
Video-input /output	8 CH inputs / VGA and HDMI output	16 CH inputs / VGA and HDMI output
Audio input /output	8 CH inputs /1CH output (RCA)	16 CH inputs /1CH output(RCA)
Display resolution	PAL: 1280*720p or 960*576 / NTSC: 1280*720p or 960*480 feature single/Quad/S.E.Q.	PAL: 1280*720p or 960*576 / NTSC:1280*720p or 960*480 feature single/Quad/S.E.Q.
Record resolution	PAL: 1280*720p or 960*576 / NTSC:1280*720p or 960*480 speed PAL:25fps(each ch) / NTSC: 30fps(each ch)	PAL: 1280*720p or 960*576 / NTSC:1280*720p or 960*480 speed PAL:25fps(each ch) / NTSC: 30fps(each ch)
Recording Mode	Continuous/Manual/Motion detect	Continuous/Manual/Motion detect
Playback Channel	1/4ch, or Via CMS, Mobile for 1ch playback, laptop for 1/4Ch playback	1/4ch, or Via CMS, Mobile for 1ch playback, laptop for 1/4Ch playback
Local DVR	1-4ch	1-4ch
PC/MAC	1-4ch	1-4ch
Smartphones	1ch (using app)	1ch (using app)
Playback speed	PAL: 25fps(each ch) / NTSC: 30fps(each ch)	PAL:25fps(each ch) / NTSC: 30fps(each ch)
Sensor & Alarm I/O	4 inputs /1 output	4 inputs /1 output
Network Type	LAN, DHCP, and DDNS	LAN, DHCP, and DDNS
E-mail Notifications	Yes, Support	Yes, Support
HDD interface	1 x SATA HDDs, up to 4TB	1SATA HDDs, up to 4TB
Multiplex Operation	Live display, record, playback, backup and network	Live display, record, playback, backup and network
USB	2 x USB (for mouse and backup/upgrade)	2 x USB (for mouse and backup/upgrade)
PTZ Control	Yes	Yes
VGA	800*600,1024*768,1280*1024,1440*900,1920*1080	800*600,1024*768,1280*1024,1440*900,1920*1080
HDMI	1080p	1080p
IR Extender Port	Yes	Yes
Dimensions	300(W) X 227(D) X 53(H)mm	300(W) X 227(D) X 53(H)mm

View live footage on a Smartphone

Plug-2-Play. For an easier way to connect the DVR to your Smartphone



FEATURES



	Cat.	Qty 1+	Qty 2+	Qty 4+
8 Channel AHD Stand Alone DVR	QV-3147	\$549.00	\$495.00	\$469.00
16 Channel AHD Stand Alone DVR	QV-3149	\$749.00	\$675.00	\$635.00

STAND ALONE DVR RANGE WITH 960H TECHNOLOGY - PREMIUM RANGE

8 & 16 CHANNEL DVR WITH 960H TECHNOLOGY

These professional 960H Digital Video Recorders offers wider, clearer DVD-quality videos for your business. Features a 1TB hard drive capacity for each disk and comes with USB, HDMI and VGA interface. Recorded events can be transferred to a USB flash drive for viewing later.

This security system is internet-ready to provide an easier way to get connected. It allows you to link your security system to the internet, Smartphone or Tablet in a few easy steps, without any messy network configuration and without any additional changes.

The system is easily customized for advanced monitoring and notification options.

Available in two models QV-8126 and QV-8128 with 8 channel and 16 channel respectively.



NEW
2015

QV-8126

QV-8128

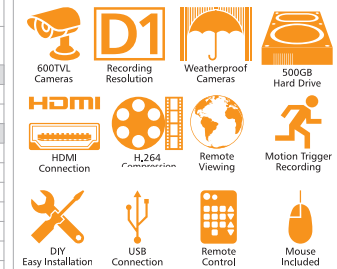
Specifications	QV-8126	QV-8128
Video input	8 channel	16 channel
Video compression	H.264	H.264
Video input interface	BNC (1.0 Vp-p, 75 Ohms), PAL/NTSC self adaptive	BNC (1.0 Vp-p, 75 Ohms), PAL/NTSC self adaptive
Audio input	1 channel, RCA (2.0 Vp-p, 1k Ohms)	1 channel, RCA (2.0 Vp-p, 1k Ohms)
Audio compression	G.711u	G.711u
Audio output	1 channel, RCA (linear, 1 k Ohms)	1 channel, RCA
HDMI/VGA	1 channel, resolution: 1920 x 1080p/60Hz, 1280 x 1024/60Hz, 1280 x 720/60Hz, 1024 x 768/60Hz	1 channel, resolution: 1920 x 1080p/60Hz, 1280 x 1024/60Hz, 1280 x 720/60Hz, 1024 x 768/60Hz
CVBS	1 channel, BNC (1.0 Vp-p, 75 Ohms), resolution: PAL:704 x 576, NTSC: 704 x 480	1 channel, BNC (1.0 Vp-p, 75 Ohms), resolution: PAL:704 x 576, NTSC: 704 x 480
Audio output	1 channel, RCA (linear, 1 k Ohms)	1 channel, RCA
Audio bit rate	64kbps	64kbps
HDD Bay	2 x SATA HDD (1 x 1TB HDD included)	2 x SATA HDD (1 x 1TB HDD included)
Capacity	Up to 4TB capacity for each disk	Up to 4TB capacity for each disk
Recording resolution	WD1/4CIF/2CIF/CIF/QCIF	WD1/4CIF/2CIF/CIF/QCIF
Frame rate	25fps(PAL)/30fps (NTSC) per channel	25fps(PAL)/30fps (NTSC) per channel
External interface	LAN: 1, RJ45 10M/100M Ethernet interface	LAN: 1, RJ45 10M/100M Ethernet interface
Power supply	12VDC	12VDC
Dimensions	445(L) x 290(W) x 45(H)mm	445(L) x 290(W) x 45(H)mm

View live footage on a Smartphone



1
YEAR WARRANTY

FEATURES



	Cat.	Qty 1+	Qty 2+	Qty 4+
8 Channel 960H Stand Alone DVR	QV-8126	\$649.00	\$599.00	\$555.00
16 Channel 960H Stand Alone DVR	QV-8128	\$899.00	\$809.00	\$765.00

TECH TALK!

960H VIDEO SURVEILLANCE TECHNOLOGY

With continuous advances in digital video sensor technology the weak point in many systems is becoming the analogue composite video cable connecting from the camera to the recorder. Without switching to IP based cameras and rewiring the building or forking out buckets of cash for HD-SDI systems, one of the best options currently available is to use 960H video technology. Cameras with 960H video sensors contain a greater number of horizontal pixels on the image sensor to capture more raw optical

information. Combined with a high grade digital signal processing chip such as the Sony® Effio™ series, the corresponding analogue signal contains more detail within the video stream which corresponds to a greater number of TV lines. When this reaches a suitable 960H compatible digital video recorder system the video stream is converted back to digital video information with the greatest amount of picture quality preserved throughout the transfer.

CAMERAS TO SUIT

1,000TVL CMOS DOME CAMERA

This camera features supreme resolution with 1000 TV Lines.

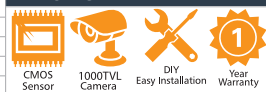
- Supplied with mounting hardware.
- 12VDC power required - use MP-3486.



NEW
2015

Specifications	QC-8641 / QC-8643
Image sensor	1/3" 1.2MP sensor
Resolution	1000 TVLine
TV type	NTSC, PAL
Minimum illumination	0 Lux (LED on) - 20m range
S/N ratio	48dB or more (AGC off)
Gain control	Automatic gain control
Power supply	Regulated 12VDC
Current consumption	max 200mA (LED on)
Lens	Fixed focal board lens
Dimensions	111(Dia) x 87(L)mm

FEATURES



	Cat.	Qty 1+	Qty 2+	Qty 4+
1000TVL Dome	QC-8641	\$99.95	\$89.95	\$84.95
1000TVL Dome with IR LEDs	QC-8643	\$149.00	\$133.95	\$129.00

1,000TVL CMOS BULLET CAMERA WITH IR

Features a weather resistant alloy housing and includes an adjustable bracket that allows the camera to be wall or ceiling mounted.

- Power and video cables exit through the base, so they are completely concealed from prying cutters.

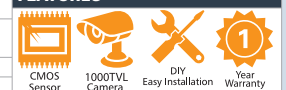
Colour may vary from the one shown



NEW
2015

Specifications	QC-8645
Image Sensor	1.2 Megapixels, 1/3" CMOS
Resolution	1000TVL
S/N Ratio	< 48dB (AGC off)
Lens	3.6mm
Min Illumination	0 Lux (LED on) - 20m range
IR Type	24 IR LEDs
Current Draw	250mA
Power Requirement	DC12V
Recommended Power Supply	MP-3011
IP Rating	IP66
Dimensions	158(D) x 59(W) x 59(H)mm

FEATURES



	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-8645	\$149.00	\$133.95	\$129.00

DOME & OUTDOOR CAMERAS

PROFESSIONAL DOME & OUTDOOR SURVEILLANCE CAMERAS

420TVL MINI CCTV CAMERA

Quality Sharp colour CCD camera, ideal for use in retail stores, home security, remote monitoring or covert applications. Feature adjustable focus lens and composite video output which can feed into the AV inputs on any DVR or TV. Requires a 12VDC regulated power supply - use MP-3011



Specifications	QC-3694
Sensor	1/3"
Sensor brand	Sharp
Resolution	420 TV Lines
Power required	12VDC
Current draw	320mA
Video output	1Vpp, 75 ohm
Min. Illumination	0Lux @ f1.2
Lens	3.6mm
Dimensions	55(H) x 42(W) x 15(D)mm

SHARP
SENSOR INSIDE

FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
420TVL	Mini	QC-3694	\$49.95	\$44.90	\$42.45

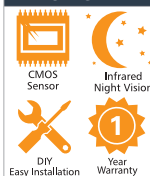
380/420TVL CMOS CAMERAS WITH IR ILLUMINATION

Versatile economical CMOS surveillance cameras with IR illumination, designed for quick and easy installation in domestic and small business surveillance systems. Available as indoor dome or outdoor weatherproof models, both versions are suitable for use on stand-alone monitors or as an additional camera for a DVR system. Supplied with power supply and combined video and power cable with standard BNC and 2.1mm DC connections.



Specifications	QC-3239
Resolution	420TV lines (Bullet) 380TV lines (Dome)
Operation	Day/night
Lens	6.0mm/45°
Power requirements	12VDC
Current draw	300mA
Cable Length	18m
Dimensions - QC-3239	85(L) x 58(Dia)mm
Dimensions - QC-8635	100(Dia) x 70(H)mm

FEATURES



↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
420TVL	Bullet	QC-3239	\$59.95	\$53.95	\$47.90
380TVL	Dome	QC-8635	\$64.95	\$58.50	\$54.95

600TVL CMOS CAMERAS WITH IR ILLUMINATION

Robust high resolution security cameras suitable for shopping centres, banks, schools, hotels, etc. Available in a weatherproof black anodised case or a neat indoor dome they feature a high quality colour CMOS sensor and IR LEDs for night time illumination. With a composite video output for easy integration into existing surveillance setups it is also supplied with a suitable power supply and 18m combined video and power lead.



Specifications	QC-8632 / QC-8633
Sensor	1/3" CMOS
Sensor resolution	(H x V pixels) 792 x 698
Horizontal resolution	600TVL
Minimum illumination	0.05Lux
IR illumination	24 LEDs
Effective IR range	Up to 10 metres
Lens / Angle	6mm / F2.0 / 45°
IP66 Rated	QC-8632 - Yes / QC-8633 - No
Power requirement	12VDC
Current draw	35mA (IR OFF), 180mA (IR ON)
Dimensions - QC-8632	135(L) x 85(H) x 68(W)mm
Dimensions - QC-8633	110(Dia) x 85(H)mm

FEATURES



↑	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
600TVL	Bullet	QC-8632	\$99.95	\$89.95	\$84.95
600TVL	Dome	QC-8633	\$99.95	\$89.95	\$84.95

600TVL WEATHERPROOF DAY/NIGHT CAMERA WITH IR

Built to withstand common weather conditions the camera comes housed inside a weatherproof case with the latest dot-matrix IR LED, a fixed 6mm lens and a 600TVL resolution. In complete darkness is where the camera, truly sets itself apart from the others.

- High power IR LEDs provides 120 of horizontal coverage and produces an infrared light output equivalent to the combined output of many ordinary IR LEDs, turning night into day.



DOT MATRIX IR LED

Specifications	QC-8627
Image sensor	1/3" Colour HDIS CMOS
Horizontal resolution	600TVL
Total pixels	480(D) x 720(W)
TV system	PAL/NTSC
Lens	6mm
IR LED	1 x 6mm IR LED
IR distance	30m
Sync system	Internal
AGC	Auto
Day/Night	IR cut filter with auto switch
Usable illumination	0.1Lux @ F1.2 (0 Lux IR LED on)
S/N ratio	>60dB
Video output	Composite (1.0Vp-p, 75ohms)
Electronic shutter time	PAL: 1/50s - 1/100,000s (auto) NTSC 1/60s - 1/100,000s
Operation temperature	-10°C - 50°C TH95% Max.
Power requirement	12VDC
Current draw	800mA
Dimensions	155(L) x 87(W) x 73(H)mm

FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
600TVL	IP	QC-8627	\$99.95	\$89.95	\$84.95

650TVL HIGH GRADE CCD CAMERAS WITH IR ILLUMINATION



Get superior quality surveillance footage with the convenience of a ready to go package by using these high grade CCD cameras. Available as an indoor dome or weatherproof outdoor model, both feature Sony® Ex-View HAD II CCD sensors and Effio(TM) DSP to provide superior video quality. With a built-in array of infrared LEDs this premium image sensor will also provide excellent low light vision ensuring high quality video is captured day or night.

- Supplied with power supply and 18m combined video and power lead
- BNC composite video output for easy integration into existing surveillance systems.

Specifications	QC-8634 / QC-8636
Sensor	1/3" CCD
Sensor type	Sony Ex-View HAD II 960H
Sensor resolution	976 x 582 (H x V pixels)
Horizontal resolution	650TVL (Day) 700TVL (Night)
Minimum illumination	0.01Lux
IR illumination	26 LEDs
Effective IR range	Up to 12m
Lens	6mm
Lens angle	45°
Power source	12VDC
Current draw	90mA (IR OFF), 400mA (IR ON)
Dimensions - QC-8634	145(L) x 85(H) x 68(W)mm
Dimensions - QC-8636	120(Dia) x 90(H)mm

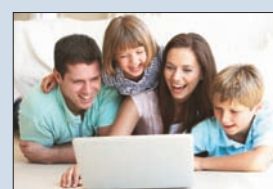
FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
650TVL	Bullet	QC-8634	\$149.00	\$133.95	\$118.95
650TVL	Dome	QC-8636	\$149.00	\$133.95	\$126.95

BUY IT ON THE WEB...

Shop for all these Jaycar Electronics products online at our website - and check out our latest products and special offers!



PROFESSIONAL DOME & OUTDOOR SURVEILLANCE CAMERAS (CONTINUED)

800TVL 3-AXIS DOME CAMERA

3-axis mechanism provides easy installation and enables you to put the camera's field of view exactly where you need it. Quality Sony® sensor and optics. It is a high resolution with 800TVL, and infrared LEDs for illumination in darkness. QC-8646 also features 20m infrared illumination and vari-focal autoiris lenses with ICR.

FEATURES



SONY
SENSOR INSIDE

NEW LOW PRICE

Specifications	QC-8644	QC-8646
Sensor	1/3" CCD	1/3"
Sensor brand	Sony® Super HAD II	Sony® Super HAD II
Sensor resolution (H x V pixels)	976(D) x 58(W)	976(D) x 582(W)
Resolution (horizontal TV lines)	800	800
Minimum illumination	0.01 lux	0.01 lux (IR off) / 0 lux (IR on)
Lens	3.6mm	2.8-12mm with ICR & Auto iris
With UTC (Up the Coax) OSD control		
Power requirements	12VDC	12VDC
Current draw	340mA	430mA
Dimensions	110(Dia) x 85(H)mm	110(Dia) x 85(H)mm

↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
800TVL	Dome	QC-8644	\$129.00	\$115.95	\$109.95
800TVL	Dome - Vari-focal	QC-8646	\$249.00	\$225.00	\$215.00

800TVL 3 AXIS OUTDOOR IR CAMERAS WITH UTC

High quality IP68 rated camera with 3-axis movement through a wide range. The power and video cables exit through the base, so are completely concealed from prying cutters. The camera bodies themselves are very compact so will fit unobtrusively into your surveillance setup.

- Equipped with IR LEDs so will work in darkness at up to 20 metres range.

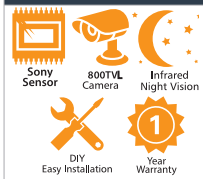
SONY
SENSOR INSIDE



NEW LOW PRICE

Specifications	QC-8640
Sensor	Sony 1/3"
Sensor brand	Sony SuperHAD II Effio-A
Sensor resolution (H x V pixels)	976 x 582
Resolution (horizontal TV lines)	800
Minimum illumination (lux)	0.01 (IR off) / 0 (IR on)
Lens	6.0mm
Power requirements	12VDC
Current draw	390mA
Dimensions (mm)	70(L) x 53(W) x 78(H)mm
Recommended Power Supply	MP-3011

FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
800TVL	Bullet	QC-8640	\$129.00	\$115.95	\$109.95

800TVL WATERPROOF IP68 VARI-FOCAL PRO IR CAMERA

A quality camera with a number of unique features that make it ideal for long range outdoor surveillance. It's housed in a robust aluminium case that provides excellent cooling performance while maintaining the integrity of the IP68 rating. The Sony® Super HAD II sensor and the camera's 42 infrared LEDs enable the system to capture images up to 40 metres away in total darkness. The IR LEDs can be switched from low, medium or high illumination for different distances.

- Supplied with sun hood, mounting bracket and hardware.
- Auto iris / Flickerless
- ICR
- 2 Stage Auto gain control
- Back light compensation

VARI-FOCAL

SONY
SENSOR INSIDE



FEATURES



Specifications	QC-8642
Sensor	1/3"
Sensor brand	Sony® SuperHAD II
Sensor resolution	976 x 582 (HxV pixels)
Resolution (Hor TV lines)	800
Minimum illumination	0.01 lux (IR off), 0 lux (IR on)
Lens - Auto Iris	9.0-22.0mm/F2.0 with ICR
IR range	40m
With UTC (Up the Coax) OSD control	
Power requirements	12VDC
Current draw	840mA max
Dimensions (exc bracket)	180(L) x 106(W) x 110(H)mm

↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
800TVL	Bullet	QC-8642	\$299.00	\$269.00	\$255.00

1,000TVL DOME CAMERAS

This camera features supreme resolution with 1,000 TV Lines with the QC-8643 also boasting a 20 metre visibility in total darkness

NEW 2015

- 24 x IR LEDs (QC-8643 only).
- Supplied with mounting hardware.
- 12VDC power required - use MP-3486.



QC-8641



QC-8643

Specifications	QC-8641 / QC-8643
Image sensor	1/3" 1.2MP sensor
Resolution	1000 TVLine
TV type	NTSC, PAL
Minimum illumination	0 Lux (LED on) - 20m range
S/N ratio	48dB or more (AGC off)
Gain control	Automatic gain control
Power supply	Regulated 12VDC ± 10%
Current consumption	max 200mA (LED on)
Lens	Fixed focal board lens
Dimensions	111(Dia) x 87(L)mm

FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
1,000TVL	Dome	QC-8641	\$99.95	\$89.95	\$84.95
1,000TVL	Dome with IR LEDs	QC-8643	\$149.00	\$133.95	\$129.00

1,000TVL BULLET CAMERA WITH IR

This 1,000TVL bullet style camera features a weather resistant alloy housing and includes an adjustable bracket that allows the camera to be wall or ceiling mounted.

NEW 2015

- Power and video cables exit through the base, so they are completely concealed from prying cutters.



Specifications	QC-8645
Image Sensor	1.2 Megapixels, 1/3" CMOS
Resolution	1000TVL
S/N Ratio	< 48dB (AGC off)
Lens	3.6mm
Min Illumination	0 Lux (LED on) - 20m range
IR Type	24 IR LEDs
Current Draw	250mA
Power Requirement	DC12V
Recommended Power Supply	MP-3011
IP Rating	IP66
Dimensions	158(D) x 59(W) x 59(H)mm

FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
1,000TVL	Bullet	QC-8645	\$149.00	\$133.95	\$129.00

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.



*ABN will be required - see our website or Store Manager for further details.

OUTDOOR & SPECIALTY CAMERAS

PROFESSIONAL HIGH DEFINITION CAMERAS

720p AHD OUTDOOR CAMERA WITH IR

Capture your surroundings with these bullet and dome high definition camera's. Featuring the latest AHD (Analogue High Definition) technology, these camera deliver crystal clear images. Backward compatible with standard analogue equipment such as DVRs, video splitters, video balun, etc.

NEW
2015



- Supplied with power supply and 18 metre coaxial cable fitted with BNC connectors.

FEATURES



Two models available.

Specifications	QC-8637	QC-8639
Image Sensor	1.0 Megapixel, 1/4" CMOS	1.0 Megapixel, 1/4" CMOS
Effective Pixels	1280 (H) x 720 (V) 720p	1280 (H) x 720 (V) 720p
Electronic Shutter	1/25 - 1/10,000 Sec	1/25 - 1/10,000 Sec
Video Frame Rate	720P @ 25fps (PAL)	720P @ 25fps (PAL)
Lens	3.6mm	3.6mm
IP Rating	IP66	IP66
Min Illumination	0.05 Lux with IR	0.05 Lux with IR
Video Output	1 channel BNC	1 channel BNC
Day / Night	IR cut	IR cut
IR Type	30 IR LEDs	30 IR LEDs
IR Range	10m	10m
Power Requirement	12VDC	12VDC
Recommended Power Supply	MP-3011	MP-3011

↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	720p Bullet	QC-8637	\$149.00	\$133.95	\$129.00
	720p Dome	QC-8639	\$149.00	\$133.95	\$129.00

1080p INFRARED BULLET IP CAMERA POWER OVER ETHERNET (PoE)

This 1080p Infrared Bullet IP Camera over PoE is constructed using professional grade material to help to prevent deterioration, and rusting. The camera can be mounted any indoor or outdoor situation. With PoE feature, the installation work is simplified and made easier so that you save both time and money. It is an ideal HD IP camera for applications work or home etc.

- 2.0 Megapixel CMOS Sensor
- 4.0MM Lens
- 36 LEDs with 20m IR range
- H.264 Compression Format
- Support P2P, Video Push
- Transmission up to 15FPS/2MP
- PoE power supply: 48VDC, 0.5A
- Support Onvif
- Dimensions: 280(L)mm x 80(Dia.)mm

FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	1,080p Bullet	QC-3122	\$249.00	\$225.00	\$215.00

DO A FRIEND A FAVOUR

If you have a technical friend or someone who may be just interested in some of the products we stock, simply mail or email his or her address to:

Catalogue Department
Jaycar Electronics: PO Box 7172
Silverwater, NSW 1811 or email
to catalogue@jaycar.com

SPECIAL APPLICATION CAMERAS

600TVL HIDDEN CAMERA MIRROR

Designed for use where concealed high security is the main requirement such as retail stores, offices, ATMs, museums, art galleries etc. To most people it looks like a simple convex security mirror but embedded behind the patented reflective layer is a 600TVL security camera.

- Features built-in colour digital noise reduction
- 3.6mm lens with standard BNC for connection to your DVR
- Ideal size for easy wall mounting.



NEW
LOW
PRICE

FEATURES



Specifications	QC-8631
TV System	PAL/NTSC
Resolution	600TVL
Power Requirement	12VDC (use MP-3011)
Current draw	500mA
Image sensor	1/3" colour Ex-view CCD
Dimensions	350(Dia) x 200(H)mm

↑	Type	Cat.	Qty 1+
	600TVL Mirror	QC-8631	\$89.95

800TVL HIDDEN CAMERA - PIR APPEARANCE

High quality camera disguised inside a housing that appears to look like a PIR. The power and video cables exit through the rear of the unit so are relatively concealed from prying eyes.

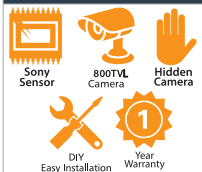
- Housing is compact and will fit unobtrusively in the corner of any room
- Equipped with a high resolution 800TVL Sony® sensor for superior image capture.



SONY
SENSOR INSIDE

Specifications	QC-8652
Sensor	Sony® 1/3"
Sensor brand	Sony® SuperHAD II
Sensor resolution (H x V pixels)	976 x 582
Resolution (horizontal TV lines)	800
Minimum illumination (lux)	0.01 (IR off) / 0 (IR on)
Lens	3.7mm
With UTC (Up the Coax) OSD control	
Power supply	12VDC
Current draw	200mA
Dimensions	47(L) x 47(W) x 120(H)mm

FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	800TVL PIR	QC-8652	\$149.00	\$133.95	\$125.95

800TVL HIDDEN CAMERA - SMOKE DETECTOR APPEARANCE

High quality camera disguised inside a housing that appears to look like a smoke detector. The power and video cables exit through the base of the unit so are completely concealed from prying eyes and cutters.

- Housing is compact so will fit unobtrusively on the ceiling
- Equipped with a high resolution 800TVL Sony® sensor for superior image capture.



SONY
SENSOR INSIDE

Specifications	QC-8650
Sensor	Sony® 1/3"
Sensor brand	Sony® SuperHAD II
Sensor resolution (H x V pixels)	976 x 582
Resolution (horizontal TV lines)	800
Minimum illumination (lux)	0.01 (IR off) / 0 (IR on)
Lens	3.7mm
With UTC (Up the Coax) OSD control	
Power supply	12VDC
Current draw	200mA
Dimensions	110(Dia) x 60(H)mm

FEATURES



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	800TVL Dome	QC-8650	\$149.00	\$133.95	\$125.95

DUMMY CAMERAS

DUMMY DOME CAMERA WITH FLASHING LED & CCTV STICKER

A simple and effective visual deterrent. This fake but realistic-looking dome camera features a high brightness flashing red 3mm LED, and is supplied with a yellow CCTV warning sticker. Great for home, office, schools or any location to discourage thieves.

- Requires 2 x AA batteries
- Includes mounting hardware
- Sticker dimensions: 110 x 110mm
- Camera dimensions: 127(Dia) x 90(H)mm



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	Dome	LA-5332	\$14.95	\$13.35	\$12.70

DUMMY DOME CAMERA KIT WITH FLASHING SIGN

A simple and effective visual deterrent, this fake security kit comes with a realistic-looking dummy dome camera and a flashing solar-powered 80 x 80mm LCD warning sign. Great for home, office, schools or any location to discourage thieves.

- Requires: 3 x AA batteries
- Dimensions: 120(Dia) x 70(H)mm



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	Dome	LA-5324	\$24.95	\$22.35	\$20.95

DUMMY WIRELESS CAMERA WITH FLASHING LED

A realistic-looking but fake wireless camera with a high brightness flashing red 3mm LED, which gives the illusion to would-be thieves that they are being watched. The camera position can be adjusted horizontally and vertically for the best angle. Great for home, office, schools or any location to discourage thieves.

- Requires 3 x AA batteries
- Includes mounting hardware
- Camera dimensions (excluding bracket): 155(L)x 60(W) x 50(H)mm



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	Bullet	LA-5334	\$14.95	\$13.35	\$12.70

DUMMY IR CAMERA

Visible deterrence is probably the most important aspect of security. Most criminals aren't completely stupid - if your premises looks like it has CCTV surveillance, they'll move on to the place that doesn't. These dummy cameras look totally convincing - they have genuine-looking IR LEDs and a real LED that adds to the illusion. Add a couple of warning signs and the baddies will never know the difference.

- Requires 2 x AA batteries
- Mounting hardware included
- UV Stabilised
- Dimensions: 175(L) x 85(Dia)mm



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	Bullet	LA-5325	\$24.95	\$22.35	\$20.95

DUMMY IR CAMERA KIT WITH FLASHING SIGN

If your premises looks like it has CCTV surveillance, potential burglars may move on to the place that doesn't. This dummy IR camera kit comes with two dummy cameras and a flashing CCTV sign, the cameras have genuine looking IR LEDs and a real LED that adds to the illusion. The CCTV flashing sign is solar powered and can be changed to not flash by covering the solar panels on the side.

- Included:
- 2 x Dummy IR cameras
 - CCTV flashing sign
 - 2 x CCTV stickers

- Specifications:
- Each camera requires 2 x AA batteries
 - Mounting hardware included
 - Camera Dimensions: 175(L) x 85(Dia)mm
 - Flashing Sign Dimensions: 50(L) x 10(W) x 50(H)mm



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	Bullets	LA-5329	\$54.95	\$49.45	\$44.95

IR SPOTLIGHT

48 LED INFRARED SPOTLIGHT LONG RANGE - 30 METRES

This long range infrared spotlight will enable an infrared or monochrome camera to operate in zero lux conditions. The beam has a range of 30 metres and will switch on automatically as darkness falls or ordinary lights are turned off. The spotlight is ideal for situation where unobtrusive surveillance is required in dark areas such as warehouses, factories, store rooms, forecourts, etc. Fitted with an adjustable mounting bracket and 450mm power lead terminated with a DC power connector.

- 30 metre range
- 48 high brightness IR LEDs
- Automatic day/night operation
- Approx 75mm dia x 140mm long
- Recommended power supply: MP-3486



↑	IR LEDs	Range	Cat.	Qty 1+	Qty 2+	Qty 4+
	48	30m	QC-3652	\$74.95	\$67.50	\$64.95

CAMERA MOUNTS

EXTERNAL CCD CAMERA HOUSING MOUNTING BRACKET



This heavy-duty aluminium bracket is designed to mount our large indoor/outdoor professional camera housing and professional range of CCD cameras. It is suitable for either internal or external use and the camera angle is fully adjustable.

- Mounting screws and wall plugs included
- Maximum payload 8kg
- Supplied in silver finish
- Bracket height is 290mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3337	\$19.95	\$17.70	\$15.70

DOME CAMERA HOUSINGS

MINI SIZE DOME CAMERA HOUSING

This dome camera housing looks exactly like the real thing, at a fraction of the price. Make your business/home/office look like its under surveillance. Even includes the metal camera case inside though with no lens.

- Can be used with QC-3474 and QC-3494
- Dimensions: 88(dia) x 68(H) mm approx.



↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	Dome	LA-5317	\$9.95	\$8.75	\$8.25

HEAVY DUTY ARMOUR DOME CASE

Designed to mount a standard board camera (up to 42mm squared). It's constructed with a strong die-cast aluminium base, and a reinforced polycarbonate dome. The dome can support more than 500kg of pressure before cracking, and can withstand a blow from a 4.5kg sledgehammer.

- Tamper proof Torx bits are used in the cover
- Large threaded side cable entry is used for security.

Specifications	
Maximum Dome Load	500kg.
Maximum Camera Size	42mm x 42mm board camera
Dimensions	84(H) x 142(dia)mm
Weight	450g



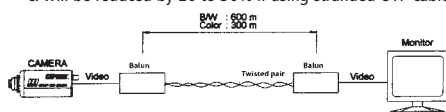
↑	Type	Cat.	Qty 1+	Qty 2+	Qty 4+
	Dome	QC-3328	\$29.95	\$26.90	\$25.45

BALUNS

CAT5 TO BNC VIDEO BALUNS

These devices simplify CCTV cabling and increase transmission distances without the need for video amplifiers. Ideal for use when covering long distances, or where an existing cable can be repurposed to carry the video signal, you simply connect the required balun to at each surveillance device and link the two points using low cost UTP cable such as Cat5, Cat5e, or Cat6. By utilising a single cable to carry multiple signals you can also save a lot of time installing cables and occupy less space in cable ducts. Available in multiple formats to cover a variety of applications, they are all passive devices requiring no power to convert the signals. Depending on how many signals are on one cable they are suitable for carrying video signals for distances up to 300m for colour or 600m for B&W*. In all cases they require an uninterrupted signal path to function, ie the cable can go through a patch panel, but not through a network switch or hub.

- Transmission distances stated are for solid core UTP cables & will be reduced by 20 to 30% if using stranded UTP cable.



SEE PAGE 417 FOR OUR AV SIGNAL BALUN RANGE

SINGLE VIDEO SIGNAL BALUNS

Designed for direct connection to a single video source, these baluns are great for installations where a single camera is a long distance from the display, or where existing Cat5 cable will save you from running a new coax cable. The flylead twin pack will connect directly to a twisted pair using fast-on terminals. Using the flylead twin pack you can also connect up to four cameras through a single cable by attaching a separate balun to each Cat5 pair.

- Built-in impedance coupler and noise filter
- Transmits video up to 300m for colour and 600m for B&W*



Specifications	QC-3660
Type	Flylead
Cable connection	Fast-on terminals
Baluns per pack	2
Dimensions	193(L) x 15(W) x 21(H)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Pair	QC-3660	\$14.95	\$13.35	\$12.70

COMBINATION SIGNAL BALUN

Allowing complete connection of a camera through a single cable, this balun combines video, power and data/audio signals for transmission over separate pairs of the Cat5 cable. The kit contains a balun for both the transmitter and receiver ends, with all connectors designed for quick installation of your surveillance equipment. Will carry video signals over distances up to 200m, with one kit including a RCA plug for audio signals while the other has a data flylead suitable for items such as PTZ cameras or alarm sensors.

- Suitable for low voltage power
- Short circuit protection for power
- Transmits video up to 200m for colour and 400m for B&W*



Specifications	QC-3662
Type	Video/Power/Audio
Cat5 connection	RJ45 socket
Video connection	BNC plug
Power connection	2.1mm plug and socket
Auxiliary connection	Audio RCA plug
Balun Dimensions	42(L) x 21(W) x 21(D)mm
Lead length	80mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Pair	QC-3662	\$29.95	\$26.90	\$25.45

CAMERA POWER ACCESSORIES

24VAC/DC TO 12VDC 300MA ADAPTOR

This simple looking device consists of a tiny 40 x 25 x 19mm module with 300mm leads connected to each end. On the input side there is a 22AWG terminal block for connecting a 24V AC or DC source. On the output side, there is a 2.1mm DC plug where you have a regulated 12VDC supply, at up to 300mA. The AC input can be 20 - 28V, and the DC input can be 16 - 30V.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MP-3069	\$22.95	\$20.35	\$18.35

AC/DC - DC CONVERTER 24 - 12VDC 1A

Trying to get power for CCTV and security cameras over a long run without losses is challenging to say the least. Solve the problem quickly and easily by sending 24VAC down the long run, then converting it to 12VDC when you get it where you need it.

- Connection is by screw terminals.

Specifications	MP-3350
Input	20 - 28VAC, 16 - 30VDC
Output	12VDC regulated
Output current	1A max
Dimensions	90(L) x 25(W) x 25(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12VDC / 24VDC 1A	MP-3350	\$34.95	\$31.45	\$29.90

CCTV POWER DISTRIBUTOR BOX

Makes distributing power to multiple CCTV cameras a simple matter. Simply connect a common source up to 30VDC and distribute it to up to 9 slave devices. Screw terminal connection.

- Individually protected PTC output
- Individual status LED indicators
- 1 - 30V AC or DC input
- Dimensions: 138(L) x 65(W) x 28(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Up to 30VAC / DC	MP-3351	\$39.95	\$35.90	\$33.90

CAMERA POWER SUPPLY

CCD CAMERA POWER SUPPLY

12VDC 500mA regulated plugpack ideal for CCD cameras.

- Terminates to a 2.1mm ID / 5.5mm OD DC plug, centre positive.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
12VDC 500mA	MP-3011	\$19.95	\$17.70	\$15.70

CCTV LEADS & ACCESSORIES

CCD CAMERA EXTENSION LEADS

The easy way to extend the length of CCD camera cables. The leads have 3 joined cables, BNC plug to plug, RCA plug to plug, and DC power male to female. The video cable used is quality RG59U, and the power cable for the shorter lengths is 24 gauge, and the 2 longer lengths are 18 gauge.



↑	Length	Cat.	Qty 1+	Qty 2+	Qty 4+
	5 metre	WQ-7275	\$19.95	\$17.70	\$16.70
	10 metre	WQ-7276	\$29.95	\$26.90	\$25.45
	15 metre	WQ-7277	\$39.95	\$35.90	\$33.90
	20 metre	WQ-7278	\$49.95	\$44.90	\$42.45

ECONOMY CCTV CABLES

Make running cables between your cameras and your DVR a breeze using these integrated video and power cables.

CCTV VIDEO & POWER CABLE

- BNC terminated
- Male DC plug on one end, female DC socket at the other.
- 18m length

Cat. WQ-7279



↑	Length	Cat.	Qty 1+	Qty 2+	Qty 4+
	18m	WQ-7279	\$19.95	\$17.70	\$16.70

CCD CAMERA POWER EXTENSION LEAD

Extend the plugpack lead for CCD cameras.

- Consists of 2.1mm male to female.
- Plug OD 5.5mm.



↑	Length	Cat.	Qty 1+	Qty 2+	Qty 4+
	5 metre	WQ-7285	\$9.95	\$8.75	\$8.25

CCTV LEADS & ACCESSORIES (CONTINUED)

MICROPHONE/AMP FOR CCTV CAMERAS

Easy add-on mini microphone with built-in amp for cameras that require an audio function. Simple to install and ideal for all surveillance applications.

- High sensitivity microphone (-65dB)
- 12VDC operation



↑	Length	Cat.	Qty 1+	Qty 2+	Qty 4+
	500mm	QC-3434	\$19.95	\$17.70	\$16.70

DC POWER LEADS - 2.1MM PLUGS TO SOCKET

Run multiple devices from a single power supply or extend the low voltage cable between a plugpack and a device. Ideal for surveillance applications and available in a range of versions to suit many applications. All cables are pre-made with moulded DC plugs and sockets.

- Three types available.
- DC Plug / Socket Dimensions:
2.1(ID) x 5.5(OD) x 10(L)mm



↑		Cat.	Qty 1+	Qty 2+	Qty 4+
	1 Socket to 2 plugs - 200mm	WQ-7280	\$7.95	\$6.95	\$6.75
	1 Socket to 2 plugs - 2 metres	WQ-7284	\$8.95	\$7.95	\$7.50
	1 Socket to 4 plugs - 2 metres	WQ-7281	\$9.95	\$8.75	\$8.25

VIDEO GROUND LOOP ISOLATOR

Ground loops are a primary cause of poor image quality in CCTV systems. This passive isolator can be easily installed in new or existing system and is useful when video signals are being transmitted between points with different ground potentials.

Specifications	QC-3432
Insertion loss	0.5dB
Frequency response	-3dB @ 10MHz
Input impedance	75 ohm
Output impedance	75 ohm
Isolation voltage	600VDC



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3432	\$59.95	\$53.95	\$50.95

INSTALLATION GUIDE

CCTV INSTALLATION GUIDE

This guide explains the various pieces of equipment required, the options available for installation and the different methods of viewing and recording the images. Topics cover camera types, lenses, light levels, power supplies, camera positioning, switchers, monitors and recorders.



↑	Cat.	Qty 1+
	8 pages, A4	BI-8206
		\$2.00

LET'S FIND EVERYTHING YOU NEED!

WARNING SIGNS & STICKERS

SURVEILLANCE WARNING STICKERS

Make sure people entering your premises know that they will be under video surveillance with this unambiguous message.

INSIDE SURVEILLANCE WARNING STICKER

- UV stabilised for long life
- Black printing on a clear background
- Sticks to inside of window
- Dimensions: 80(W) x 40(H)mm



OUTSIDE SURVEILLANCE WARNING STICKER

- Silver colour
- Sticks to outside of window
- Dimensions: 80(W) x 40(H)mm

LARGE OUTSIDE SURVEILLANCE WARNING STICKER

- Black lettering on white background
- Sticks to outside of window
- Dimensions: 120(W) x 50(H)mm



↑	Type	Size	Cat.	Qty 1+	Qty 2+	Qty 4+
	Small Inside	80 x 40mm	LA-5106	\$2.95	\$2.60	\$2.30
	Small Outside	80 x 40mm	LA-5107	\$2.95	\$2.60	\$2.30
	Large Outside	120 x 50mm	LA-5108	\$3.95	\$3.45	\$3.15

RF BUG & CAMERA DETECTORS

CAMERA DETECTOR

Protect your privacy! Covert cameras and listening device are nearly impossible to spot by the naked eye. This handy little unit will detect hidden wired and wireless cameras through the unit's lens finder. The 6 pulsing LEDs reveals the location of a camera by illuminating its lens when you look through the lens viewer. Also features a built-in wireless RF detector that provides audible (buzzer) and visual (LED) signal strength indication. Great for detecting wireless transmitters and eavesdropping devices. It even comes with a set of earphones for complete discrete bug detection.



- Requires 2 x AAA batteries (use our SB-2426).

Specifications	QC-3506
Laser detection range	0.1 - 10m
RF detection range	0 - 10m
RF frequency range	1.0MHz - 6.5GHz
Dimensions	85(H) x 56(W) x 18(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	QC-3506	\$99.95	\$89.95	\$79.95

IR/RF SIGNAL TESTER

This device detects and confirms radio frequency and/or infrared emission from key fobs and remote controls and even signal strength. It helps to diagnose faults quickly and easily without the need to dismantle the fob, remote or vehicle. Features a magnetic backing to stick to the side of any ferrous surface making distance test of transmitter a possibility. Suitable for a wide variety of vehicle and electronic/electrical applications.

- Long battery life, auto shutdown when not in use in 1 mins
- Super bright LED indicator
- Powered by 9.0V battery (not included)
- Detects: intra-red or Radio Frequency
- RF ranges: 418MHz, 433-434MHz, and 868MHz
- Dimensions: 118(L) x 65(W) x 25(D)mm



Product may vary slightly from the one shown

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	QP-2230	\$34.95	\$31.45	\$27.90

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

CCTV STICKER - LARGE SIZE

Visible deterrent to intruders. Bright yellow to attract attention. Partner with a dummy camera or two for a complete faux security system or just to warn that the real thing is installed.

- Dimensions: 110(W) x 110(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5101	\$3.95	\$3.45	\$3.15

SURVEILLANCE WARNING SIGN 300 X 300MM

Visual deterrents are one of the most effective security measures you can use. This sign will ward off thieves and let them know you have state-of-the-art surveillance on your property - even if you don't. It's made of acrylic, so it's lightweight and durable.

- Dimensions: 300(W) x 300(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	LA-5115	\$14.95	\$13.35	\$12.70

CCTV WARNING SIGN

Prominent warning sign for CCTV or dummy surveillance applications. Made from acrylic for durability.

- Dimensions: 300(W) x 210(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5114	\$14.95	\$13.35	\$11.70

SURVEILLANCE MONITORS

SURVEILLANCE MONITOR

17" LED SURVEILLANCE MONITOR

High resolution slimline monitor suitable for surveillance applications. Ideal for use with our range of DVR camera kits.

- Its 4:3 aspect ratio that means the camera vision won't appear distorted or stretched, unlike 16:9 monitors.

Specifications	QM-3578
Panel Size	17.0
Resolution	1280x1024
Brightness (Max.)	250 cd
Contrast Ratio (Max.)	1000:1
Smart Contrast Ratio(ASCR)	50000000:1
Display Colours	16.7M
Response Time	5ms
Input	HDMI, VGA, BNC x 1
Dimensions	378(W) x 315(H) x 62(D)mm



NEW
2015

WHY SO EXPENSIVE?

We agree! EXCEPT that none of the big manufacturers want to make 4:3 aspect ratio (ie: "Surveillance") any more. You can buy 16:9 monitors cheaper, but they are useless for surveillance applications. Indeed, we're lucky to get 4:3 monitors at all!



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	QM-3578	\$249.00	\$225.00	\$209.00

7" TFT LCD WIDESCREEN COLOUR MONITOR WITH IR REMOTE



It will deliver high resolution pictures in widescreen format and clear sound reproduction through its inbuilt speaker. It is extremely lightweight and is suitable for all sorts of mobile and fixed monitoring applications. Suitable for in-car and home entertainment, use it to watch DVDs, PS2®, XBOX®, etc. Two RCA composite video inputs and one audio input are provided for a multi source system. This is truly a versatile monitor, it has low power consumption, wide viewing angle, and is NTSC and PAL compatible. It is equipped with On Screen Display enabling the user to easily control the colour, contrast, hue, brightness, and volume. A very slim and small infrared remote control is included. It has reverse image capability adjustable by pressing a button.

- Unit comes with an adjustable swivel bracket with double sided tape for adhesion on clean flat surfaces.
- 4 pin mini din to 2 RCA and power cable is also supplied.



Specifications	QM-3752
System	NTSC/PAL
Power input	12VDC
Power consumption	10W
Video input	Composite video signal 1Vpp 75 Ohm
Audio input	10dB (10k Ohm)
Operating temperature	-10°C to + 40°C
Screen size	7" (diagonal width)
Display method	TFT Active matrix system
Resolution	1140(H) x 234(V)
Weight	800g

TECH TALK!

*Works with most, but not all widescreen sources. Will default to modified widescreen in some cases.



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	QM-3752	\$119.00	\$106.95	\$94.95

9" LCD MONITOR WITH 4 CHANNEL DVR - 12/24V



Connect up to 4 cameras and record all 4 channels with this 12/24V mobile DVR. Incorporates a large 9" colour display in a tough metal chassis with sunshade. It adopts industry standard 4G shockproof technology to ensure clear continuous video recording onto an SD card (available separately) while on the move.

- It is ideal for truck, bus, caravans and other heavy duty mobile installation.
- Supplied with power cable, remote control and user manual.



Specifications	QM-3872
Screen Size	9"
Screen Ratio	16:9
Resolution	800 x 480
Backlight	LED, 300cd/m2
Image Rotation	UP/Down and Left/Right
View Angle	UP 50°, Down 70°, Left 70°, Right 70°
Display	1,2,4 channel
System	NTSC & PAL (Auto switch)
Recording	4 Ch 640 x 480 at 60fps
Storage	SD, up to 32GB
Storage Format	AVI
OSD Control	Brightness, Contrast, Colour, Volume
Power	12-24V DC
Power Consumption	8W
Shock Level	4G
AV input	4 Video inputs, 1 audio input
Dimensions	240(W) x 163(H) x 26(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
	QM-3872	\$279.00	\$255.00	\$225.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$4.95
AR-1415



SCREEN CLEANER

P491

FROM
\$8.50
WA-7078



RCA LEADS

P412

FROM
\$6.15
HP-1218



SPIRAL BINDING

P218

FROM
\$8.95
XC-4998



SD CARDS

P508

WIRELESS DVR & CAMERA KITS - DIGITAL 2.4GHZ

These compact camera and DVR kits are easy to install and suitable for surveillance in and around a small shop, office or home. Up to 100m range between camera and receiver provides you with ample coverage, and the digital 2.4GHz wireless signal delivers clear, flicker free images. MJPEG video compression makes efficient use of the available bandwidth while frequency hopping drastically reduces signal interference caused by other

electronic devices. The weatherproof cameras are suitable for use outdoors and withstand common outdoor weather conditions, including heavy rain. You can continue to monitor and record in complete darkness with the built-in IR LEDs illuminating objects up to 5m away. The receiver records to a SD memory card (up to 32GB), making it easy to transport footage offsite.

DIGITAL 2.4GHZ WIRELESS 3.5" LCD & CAMERA KIT

This wireless surveillance kit allows you to get on with your work while keeping a close eye on what is happening around and behind you. The included wireless monitor with 3.5" colour display mounts to a glass or flat surface using the supplied bracket with suction cup, and features a built-in speaker with adjustable volume. The wireless digital camera features an adjustable mounting bracket, high sensitivity microphone, antenna and infrared LEDs to illuminate intruders at night time. The system uses digital 2.4GHz technology for a secure and interference free transmission. Suits a wide range of surveillance applications for shops, home, workshop and baby care.

Kit includes:

- 1 x Wireless 3.5" LCD with suction cup bracket
- 1 x Wireless IR camera
- 2 x 5V DC mains power adaptors



NEW
2015

1
YEAR WARRANTY

FEATURES



Specifications	QC-3673
Transmission Frequency	2400MHz-2480MHz
Operation Distance	up to 100m line-of-sight
Modulation mode	FHSS
Camera Day time	max 200mA
Night time	max 300mA
Monitor	150mA (no matter day or night time)

	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3673	\$139.00	\$124.95	\$119.95

WIRELESS DVR KIT WITH SOLAR POWERED 2.4GHZ DIGITAL WIRELESS CAMERA, PIR SENSOR & 2 X 5W LED LIGHTS

Keep the perimeter of your home or business secure with this easy to install wireless DVR kit. The integrated PIR sensor provides reliable motion detection, triggering both the camera and 2 x 5W LED lights (when dark). Video is transmitted wirelessly and a 3W monocrystalline solar panel keep the batteries charged, so it can be installed in areas where it is too difficult to run wires. The DVR accepts up to 4 cameras, which can be monitored one at a time or in a quad view. The camera can be motion or voice activated and set to record up to ten seconds of video or take a snapshot.

- Kit includes: DVR receiver with mains adaptor, remote control, camera sensor light with rechargeable Li-ion battery, solar panel and USB & AV cables.
- Spare camera to suit QC-3646



- Single or quad view
- Audio monitoring
- Video zoom support
- Voice activated recording
- Motion activated recording
- Alarm support
- Photo album support
- Record audio and video
- Playback audio and video
- Multinational language support



NEW
LOW
PRICE

1
YEAR WARRANTY

Camera, Light Specifications	QC-3644
Rechargeable battery	7.4V/2200mAh Li-ion battery
Solar Panel	12V/3W monocrystalline
Transmission frequency	ISM 2400 2483.5MHz
Modulation mode	GFSK
RF Rate	3Mbps
Transmission power	20dB
Transmission distance	up to 150m
Lumens	Up to 600
Colour Temperature	6000K 7000K
IR night-vision lamp	
Motion detection range	up to 15m, 160° wide
Encoding	H.264 at 480x272, 25fps
Built-in microphone	
Lamp dimension (extended with antenna)	290(L) x 215(W) x 118(D)mm
Solar panel dimension (including bracket)	187(L) x 175(W) x 30(D)mm

DVR Specifications	QC-3644
Transmission frequency	ISM 2400 2483.5MHz
Modulation mode	GFSK
RF rate	3Mbps
Transmission power	20dB
Transmission distance	300m
Video-out resolution	720x576, 720x480
Encoding	H.264 at 480x272, 25fps
SD memory card	1GB to 32GB (2GB SD card included)
Speaker function for voice communication	
Quad view resolution	240x136, 60fps (each camera)
Dimensions (inc base and antenna)	207(L) x 92(W) x 77(D)mm

FEATURES



	Cat.	Qty 1+
DVR Camera Kit	QC-3644	\$179.00

WIRELESS CAMERA & DVR KITS

WIRELESS DVR & CAMERA KITS - DIGITAL 2.4GHz (CONTINUED)

DIGITAL WIRELESS RECEIVER DVR WITH 7" LCD & CAMERA KIT

A ready to go wireless security solution with minimal setup steps. It's a full kit complete with a 7" LCD/DVR combo, and 1 x camera to help you monitor the goings on your office, retail shop, or workshop. Wireless design means you don't have to spend time and money having CCTV cables installed in walls, roofs, or other locations. 1 x IR wireless camera is included but extras can be purchased separately (QC-3677), a total of 4 cameras can be used. The camera has a motion sensor which will help trigger recording when movement is detected and the IR LEDs means you can record at night. The LCD screen can be set into 4 frames allowing you to simultaneously view input from 4 different camera sources. The receiver can record to an SD memory card (available separately) to playback at a later date.

Spare Cameras to suit QC-3675: QC-3677



FEATURES



WHAT'S IN THE KIT? • 1 x IR Camera • 1 x DVR/Receiver Unit • 2 x Power supplies
MONITOR • 7" TFT LCD Built into Receiver
WHAT YOU MAY NEED • Additional Cameras - up to total of 4. Use Cat. QC-3677
OPTIONAL • SD Memory card (SDHC) up to 32GB

DISPLAY	QC-3675
Display	7" TFT LCD
Effective Pixels	640x480
Video format	NTSC/PAL
Video Compression	MJPEG - 4
Video inputs	4 Channel wireless single - Supports up to 4 cameras
Outputs	1 composite output / 1 x composite
Frame rate	640x480 20fps VGA 220x240 25fps QVGA
Memory card	Up to 32GB (SDHC)
Frequency	2.4GHz (Digital FHSS)
Transmission Range	Approx 200m (open sight) - estimate under ideal conditions
Power supply	12VDC 1A
Dimensions	200(W) x 118(H) x 20(D)mm
CAMERA	QC-3677
Sensor	1/4" OV7725 CMOS
Horizontal resolution	420TVL
Minimum Illumination	0 Lux (IR ON)
Lens	6mm
Voltage	5VDC 1A
Dimensions	50(Dia.) x 69(D)mm (excluding sun shade)

	Cat.	Qty 1+	Qty 2+	Qty 4+
DVR & Camera Kit	QC-3675	\$249.00	\$225.00	\$209.00
Wireless Spare Camera	QC-3677	\$129.00	\$115.95	\$109.95

DIGITAL WIRELESS RECEIVER DVR WITH 1 X IR CAMERA KIT

This simple to install security kit includes a digital wireless DVR and 1 x IR camera to assist in monitoring environments subject to criminal behaviour, simply connect the DVR to your TV to monitor the camera feed. Wireless allows you to bypass the need to run metres of CCTV cabling in hard to reach areas. Though 1x IR camera is included, the unit can be expanded up to 4 cameras which can be purchased separately (QC-3677). Minimal setup required.



FEATURES



WHAT'S IN THE KIT? • 1 x IR Camera • 1 x DVR/Receiver Unit • 2 x Power supplies
WHAT YOU MAY NEED • Additional Cameras - up to total of 4. Use Cat. QC-3677
OPTIONAL • SD Memory card (SDHC) up to 32GB • Monitor QM-3752

DISPLAY	QC-3676
Display	not included
Effective Pixels	N/A
Video format	NTSC/PAL
Video Compression	MJPEG - 4
Video inputs	4 Channel wireless single - Supports up to 4 cameras
Outputs	1 composite output / 1 x composite
Frame rate	640x480 20fps VGA 220x240 25fps QVGA
Memory card	Up to 32GB (SDHC)
Frequency	2.4GHz (Digital FHSS)
Transmission Range	Approx 200m (open sight) - estimate under ideal conditions
Power supply	12VDC 1A
Dimensions	112(W) x 111(H) x 20(D)mm*
CAMERA	QC-3677
Sensor	1/4" OV7725 CMOS
Horizontal resolution	420TVL
Minimum Illumination	0 Lux (IR ON)
Lens	6mm
Voltage	5VDC 1A
Dimensions	50(Dia.) x 69(D)mm (excluding sun shade)

	Cat.	Qty 1+	Qty 2+	Qty 4+
Receiver & Camera Kit	QC-3676	\$199.00	\$178.95	\$169.00
Wireless Spare Camera	QC-3677	\$129.00	\$115.95	\$109.95

LET'S FIND EVERYTHING YOU NEED!

SPARE CAMERAS

WIRELESS CAMERA TO SUIT QC-3675 & QC-3676 RECEIVERS

Mounting bracket and power supply included

Specifications	QC-3677
Image sensor	1/4" OV7725 CMOS
Resolution	420TVL
Min.illumination	0 lux (IR ON)
Lens	6mm
Effective pixels	640(H) x 480(V)
S/N ratio	More than 48dB
Video output	1Vp-p/750Hms
Power supply	5VDC 1A



NEW 2015

1 YEAR WARRANTY

	Cat.	Qty 1+	Qty 2+	Qty 4+
	QC-3677	\$129.00	\$115.95	\$109.95

SPARE SOLAR POWERED WIRELESS CAMERA TO SUIT QC-3644

Suitable for use with the original QC-3644 DVR Kit. Supplied with rechargeable 7.4V/2200mAh li-ion battery, and 12V 3W solar panel.

Specifications	QC-3646
Transmission distance	up to 90m
Light output	up to 600 Lumens
Colour Temperature	6000K - 7000K
Motion detection range	up to 15m, 160° wide
Built-in microphone	Yes
Lamp dimension	290(L) x 215(W) x 118(D)mm
Solar panel	187(L) x 175(W) x 30(D)mm



NEW LOW PRICE

1 YEAR WARRANTY

	Cat.	Qty 1+
	QC-3646	\$119.00

WIRELESS DIGITAL DVR & CAMERA KIT

NETWORK 2.4GHZ DIGITAL WIRELESS 7" LCD DVR RECEIVER & CAMERA KIT

Simple to install and setup, wireless and easy to use. This DVR kit is ideal for homes, offices or retail stores where security is essential. Monitor footage on the 7" LCD screen, or remotely on your iPhone® or Android device. Recording can be motion-triggered to save storage space on your SD card (available separately) so you never miss a thing. It can also be used for larger areas: simply purchase additional cameras (QC-3761) as required (maximum of 4 cameras) and you're ready to go. With Ethernet capability you can monitor the cameras remotely on your Smartphone, and IR LEDs enable you to view footage at night in the dark.

- Supports remote viewing via iOS® & Android systems
- Supports quad view mode with 4 cameras
- Record 4 channels individually by SD card, each channel has adjustable recording resolution
- Record & playback resolution up to 720p
- Record & playback simultaneously

Specifications	
Monitor	QC-3760
Operating frequency	2.4GHz
Video compression format	MPEG4
Transmission distance	Up to 100m (line of sight)
Display	Colour 7" LCD
Resolution	800x480
Number of cameras	Supports up to 4 cameras
Memory capacity	Up to 32 GB
Camera	QC-3761
Recording frame rate	720p, 20fps: VGAx4 (Each channel resolution adjustable)
Image sensor	Colour CMOS
Resolution	1.2MP
Video compression	MPEG4
IR LED	5mm x 24
Minimum illumination	0Lux(IR ON)



NEW
2015

Remote Viewing	
System support	Android/ iOS®
Frame rate by remote	30fps at QVGA; 20fps at VGA; 10fps at 720p

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
7" DVR Kit	QC-3760	\$339.00	\$305.00	\$289.00
Spare Camera	QC-3761	\$139.00	\$124.95	\$119.95

STAND ALONE CAMERAS WITH RECORDING

MINI DAY/NIGHT HD CAMERA WITH IR - 720P

Not only is this day/night camera a compact standalone unit, it has IR LEDs (to see in complete darkness) and captures images at a resolution of 720p. You can choose to record continuous video or via motion detection. It writes to a TF card (not included), up to 32GB capacity. That's over 9 hours of footage! Typical camera positions are just out of reach so a remote has been supplied to allow control from a distance. To watch the video, remove the TF card for playback on your PC or use the AV cable and connect the camera to a TV. It can also be used as a webcam.

Specifications	QC-8019
Pixels	1.3 million
Sensor type	CMOS, 140°
Min. illumination	1 Lux
Battery capacity	1020mAh
Continuous recording time	over 5 hrs
Power	200mA/3.7V (max)
Memory card type	TF card
USB interface	Mini 5Pin, USB 1.1/2.0
Storage consumption	1GB = approx. 18mins
Charge time: approx.	3hrs
Size Without bracket	68(L) x 50(W) x 44(D)mm
Size With bracket	67(L) x 67(W) x 65(D)mm



1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
	QC-8019	\$99.95	\$89.95	\$84.95

MINI RECHARGEABLE WI-FI IP STICK CAMERA

This extremely small Wi-Fi camera allows you to stream and record video with audio over your network to your Smartphone (iPhone® or Android® device) or laptop, or to an external microSD card (sold separately) to play back later. It is powered by a built-in rechargeable battery, and includes 3 x versatile camera mount options for different applications. A USB charging cable, microSD card USB adaptor, weatherproof casing, and even a neck strap is supplied.

Specifications	QC-3850
Camera	1.3M CMOS
VGA	640x480 up to 30fps
Focal distance	2.8mm
Video Recorder	Motion JPEG
Wireless Range	up to 50m
Support	iOS®, Android Smartphones
Microphone	Built-in
Output Interface	1 x Mini USB, 1 x microSD Card Slot
Support Storage	microSD Card supports up to 32GB (not included)
Power Interface	DC 5V 800mA
Dimensions	57(H) x 20.5(W) x 20.5(D)mm



Wi Fi
Enabled



1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Wi-Fi 1.3MPixels	QC-3850	\$109.00	\$89.95	\$84.95

OUTDOOR 5MP SECURITY CAMERA WITH PIR

A motion activated weatherproof camera suitable for outdoor domestic security applications. It will record video in 720p quality when motion is detected for you to playback later on a computer or TV.

- Features a bright 38 LED infrared light to illuminate objects at night, LCD status display, and schedule function
- SD card is required (available separately) as well as 4 x C batteries, which can last for months.
- Option for a 6VDC power supply (use MP-3145).
- Easy to install and operate.



Stand not included

Specifications	QC-8027
Operation	Day/Night(24hours), Day (Colour)/Night (Black/White)
Image Sensor	5MP Colour CMOS sensor
Picture Resolution	8MP max
Video Resolution	1280 x 720(20fps) with Audio
Lens	50° Field of View
IP Rating	IP66
IR Range	Up to 9m
IR Illumination	38 IR Emitters
Time Lapse	5 - 600 seconds programmable
Delay Time	1 - 600 seconds programmable
Stamping	Date/Time stamped on still image/video
User Interface	Bottom control panel with LCD Display
External Memory	SD-card up to 32GB
Ports	TV Out, USB, SD Card, 6V DC
Video output	PAL, NTSC
Power Supply	4 x C cells or 6VDC (not included)
Dimensions	140(H) x 75(Dia)mm, 280g

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
	QC-8027	\$169.00	\$151.95	\$144.95

OUTDOOR CAMERAS

OUTDOOR DVR MONITORING SYSTEMS

MOTION ACTIVATED OUTDOOR CAMERA WITH IR FLASH

A weather resistant outdoor camera for a wide range of outdoor applications, including surveillance around the home, office or warehouse, or for wildlife applications. The PIR sensor triggers the 7MP camera for colour photos and videos by day or monochrome photo and videos by night. Night vision is assisted using the bright IR flash, which illuminates objects up to 12 metres away.

Photos and videos up to 90 seconds long are recorded to its 16MB internal memory or an SD Card (up to 32GB, available separately) for more storage. Playback the vision on the integrated 1.5" colour LCD screen while in the field, or by connecting to a PC.

Other features include a fast 1.3sec trigger time, highly sensitive microphone, TV output, and security lock hole for a padlock. Power is provided by 4 x D and 3 x C batteries (batteries required). We recommend Alkaline batteries for longer operation. Supplied with USB and TV cable, mounting strap, lens hood and instruction manual.

Features:

- 3MP camera (up to 7MP Interpolated)
- Adjustable sensitivity (motion sensor)
- 5mm /8mm mixed infrared LED technology for wide and longer illumination
- Fast trigger time 1.3s at turbo mode
- Separate controls for camera and sensor, ideal to instant setup directly
- Time and Date stamp
- Built-in 1.5" TFT screen
- Backlit for Motion control LCD
- Pause time: 0-60 minutes
- Video length: 3-90s for day and night
- 1-3 Quick Shots setting
- 2-5 Burst Shots setting

Specifications	QC-8048
Video resolution	HD 1280 x 720 at 30fps
Power	4 x D & 3 x C Batteries required
Weight	518gm without batteries
Dimensions	192(H) x 120(W) x 90(D)mm

IR WIRED FLASH - QC-8042

Gooseneck sensor on the booster is triggered by the cameras built-in flash so both will occur synchronously. Features 36 wide angle IR LEDs and a 2m cable.

- Extension port to 'daisy chain' multiple flash units
- Adjustable illumination angle
- Requires 2 x D Batteries or 3VDC power supply
- Dimensions: 115(H) x 57(W) x 90(D)mm



NEW LOW PRICE

IR WIRELESS FLASH - QC-8044

Wireless unit will detect a flash from the main outdoor camera and simultaneously flash to give more IR coverage to the target. The 128 infrared LEDs are invisible to the human eye. Belt mount so it can be attached to a tree or pole.

- Supplied with transmitter with antenna, belt.
- Adjustable illumination angle
- Requires 4 x D Batteries or 6VDC powered
- Dimensions: 145(H) x 100(W) x 70(D)mm



SECURITY BRACKET TO SUIT - QC-8046

Mount your QC-8048 Outdoor Camera securely to a tree using this tough anodised camouflage green bracket. Four mounting holes for screws or cable ties, and keep in place using padlocks (not included).

- Dimensions: 173(L) x 153(W)mm



NEW 2015

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
3MP Outdoor Camera	QC-8048	\$179.00	\$160.95	\$142.95
IR Wired Flash to suit	QC-8042	\$49.95	\$44.95	\$41.95
IR Wireless Flash to suit	QC-8044	\$129.00	\$115.95	\$109.95
Bracket for QC-8048	QC-8046	\$12.95	\$11.35	\$10.95

WARNING!

Warning: These cameras should not be placed in areas where there is an expectation of privacy. Such places typically are: bathrooms, bedrooms, toilets, dressing rooms etc.. Use of these devices in such locations, can lead to criminal prosecution and severe penalties.

720P OUTDOOR CAMERA WITH SOLAR CHARGER

A motion triggered outdoor camera to record photos or HD videos of wildlife or intruders. This camera is equipped with a solar panel to allow continuous operation without the need to worry about battery levels. Camera is secured in a rugged housing suitable for mounting virtually anywhere. The built-in 48 infrared LEDs provide night time illumination up to 20m and are invisible to the human eye. It can also be setup as a time-lapse recorder with status shown on the built-in LCD display.

- Time Lapse programming
- Status LCD display
- Built-in PIR with 20m range
- Infrared LEDs with 20m range
- AV Output for video & photo playback

Specifications	QC-8049
IP Rating	IP65
Image Sensor	5MP (interpolated up to 12MP), 50 degrees
Video Resolution	1280 x 720 at 30fps
Video Format	MJPEG (Colour by day, B&W by night)
External Memory	UP to 32GB SD Card (not included)
Dimensions	165(H) x 140(W) x 60(D)mm



QC-8049

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
5MP Outdoor Camera with Solar Charger	QC-8049	\$279.00	\$255.00	\$239.00

LET'S FIND EVERYTHING YOU NEED!

FROM
\$6.95
SB-2912



PREMIUM C & D BATTERIES P323

FROM
\$8.95
XC-4998



SD CARD P508

FROM
\$3.95
LA-5101



SURVEILLANCE STICKERS P439

FROM
\$119.00
SL-2705



TRACKING SPOTLIGHT P460

TIME LAPSE CAMERAS

WEATHERPROOF TIME LAPSE HD CAMERA

Take amazing time lapse videos of your spring flowers opening, start to finish of the renovation, cityscapes, etc. Captures photos at pre-set time intervals between 5 seconds to 24 hours and creates an AVI video on a USB memory stick for playback on a PC. The included 2GB memory stick will store up to 30 minutes of video which contains 600 photos each minute, a total of 18,000 photos!

- 1280 x 1024 resolution
- Supports USB memory sticks up to 8GB
- Standard and Macro image (for closer shots)
- Weatherproof
- Supports up to an 8GB USB Flash Drive
- Software Compatible with Windows XP, Windows Vista, Windows 7
- Includes 4 x AA batteries
- Dimensions: 192(H) x 93(W) x 60(D)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Time Lapse Camera & Recorder	QC-8030	\$229.00	\$209.00	\$195.00

TIME LAPSE HD VIDEO CAMERA WITH LCD VIEWFINDER

Create amazing time lapse videos in high definition with this clever time lapse camera. It captures images at a preset intervals between 1 second to 24 hours and creates an AVI video file that you can playback later. Setup and operation is easy; simply use the LCD viewfinder and 120 degree rotatable lens to frame your subject, set the time interval, and start capturing. The video on the included 2GB SD card can be played back on a computer, media player, suitable TV or digital photo frame. The supplied 4 x AA batteries can capture 300,000 frames. It can also be powered from the USB port of a computer (USB cable required).

Specifications	QC-8034
Video format	AVI
Resolution	1280 x 720, 640 x 480
Field of view	59 degrees
Focal length	36mm (35mm equivalent)
Focus distance	75cm (Minimum)
Time Interval	from 1 second to 24 hours
Memory storage	SD Card (Supports up to 32GB)
LCD Screen	1.44" Colour TFT
Power Source	
Battery	4 x AA included
DC	5VDC (Micro USB connector)
Dimensions	106(H) x 64(W) x 46(D)mm
Weight	120g

Use the QC-8033 remote control to create stop motion footage



OPTIONAL ACCESSORIES



Note: Accessories not stocked at all stores - call ahead first

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Time Lapse Camera & Recorder	QC-8034	\$269.00	\$245.00	\$229.00
Wide Angle Lens to Suit	QC-8031	\$179.00	\$160.95	\$151.95
Shutter Cord Switch to Suit	QC-8033	\$19.95		
Motion Sensor PIR to Suit	QC-8035	\$89.95	\$80.95	\$74.95
Waterproof Housing to Suit	QC-8037	\$79.95	\$71.95	\$67.95
Bag Pouch to Suit	QC-8039	\$39.95	\$35.90	\$33.90

HDR TIME LAPSE PROFESSIONAL VIDEO RECORDER

Easily create stunning time lapse videos with the push of a button. This model features an advanced HDR image sensor so it is able to capture excellent videos in harsh light without washing out the image. It will also capture very well in darkness. The HDR sensor creates a richness in the image quality that traditional digital sensors can't. There is a 1.44" LCD viewfinder so you can setup the perfect angle and set it to record. The included lens is CS mount, so it can be interchanged with virtually any other CS mount lens but results may vary.

- A 4GB SD card is included which can capture up to 30,000 images.
- Still images can be taken with the use of an additional accessory (QC-8033)

Note: Different CS mount lenses may produce varying results

Specifications	QC-8038
Camera	
LCD Screen	1.44" TFT LCD
Lens Rotating Angle	120°
Capture mode	
Time lapse	Auto generation of time lapse video
Image sensor	
Type	1/3" HDR sensor
Dynamic range	115dB
Resolution	1.3 Mega pixel
Sensitivity	3650mV/lux-sec
Optical lens (BCS 019)	
Type	CS Mount (Aspherical Glass Lens)
Aperture	F 2.0
Field of view	112°
Focal length	19mm (35mm equivalent)
Focus distance	Manual focus from 1cm to infinity
Shooting settings	
Scenes	Daylight, twilight, night, moon
White balance	Auto, day, shade, cloudy, fluorescent light (cool) fluorescent light (warm), tungsten light
Custom image	Exposure, saturation, contrast, sharpness

WATERPROOF HOUSING TO SUIT

- Weight: 99g
 - 125(H) x 89(W) x 54(D)mm
- QC-8040



STOP MOTION SHUTTER LINE

QC-8033



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Time Lapse Camera & Recorder	QC-8038	\$489.00	\$439.00	\$415.00
Weatherproof Housing	QC-8040	\$79.95	\$71.95	\$67.95
Stop Motion Shutter Line	QC-8033	\$19.95		

WI-FI & WIRED IP CAMERAS

WI-FI HIGH DEFINITION CAMERAS

720p HIGH DEFINITION INDOOR RECHARGEABLE WI FI CAMERA

Connects to your Wi-Fi network and streams high definition video with audio to a computer or Smartphone on or outside the network with password access. Setup is a breeze too using the built-in P2P technology - no confusing IP or router settings needed! There is an APP so you can put 3-4 cameras like this in your workplace, home or anywhere needed and monitor via your Smartphone. The built-in battery allows you to locate it away from power for a few hours for a temporary surveillance application.

- Works with Smartphone via Wi Fi and free App.
- Easy and friendly user interface
- Easy to save photos and video to Smartphone
- Built-in Motion detector and night vision
- Support H.264 Video Compression, 720p HD Video quality
- Support operating system 5.1(iOS®) / 4.2(Android®) or higher
- Battery Life: 2 hours (rechargeable battery)
- Dimensions: 75(D) x 43(H) x 38(W)mm



NEW
2015

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p HD Indoor Wi-Fi Camera	QC-3848	\$179.00	\$160.95	\$151.95

720p HIGH DEFINITION OUTDOOR WI FI CAMERA

With the incorporated (P2P) plug-and-play technology this tough external camera equipped with Infrared LEDs for night monitoring is one of the easiest video security products to setup. View live footage on your Tablet or Smartphone in minutes. Unlike traditional digital network cameras, there is no specialised IT technical expertise required during installation. No router setup required, No port forwarding to be done, a static IP address is not required from your internet service provider. All of this highly technical expertise is simply not needed to install this camera, making it a breakthrough in technology, and one of the easiest to install tablet / Smartphone connect security camera products ever.

Specifications	QC-3846
Sensor	1/3" colour CMOS sensor
Sensor resolution (H x V pixels)	720 x 1280 at 30fps
Horizontal resolution	720TVL@ 30fps
Minimum illumination	0.01Lux
IR illumination	12 LEDs
Wireless Security	WEP, WPA, WPA2
Wireless Distance	50m (Clear Line of sight)
Effective IR range	Up to 12 metres
Lens	3.6mm lens, 90° angle
IP rating	IP66
Power supply	12VDC (included)
Dimensions	155(L) x 87(W) x 73(H)mm



NEW
2015

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p HD Outdoor Wi-Fi Camera	QC-3846	\$179.00	\$160.95	\$151.95

720p HIGH DEFINITION P2P WI FI PAN & TILT CAMERA

Featuring Pan/ Tilt functionality and incorporated (P2P) plug-and-play technology, this Wi-Fi IP camera is the way to go. This model features a 720P camera that produces a bright and sharp vision for you to survey the home or office. The audio is two way, so you can plug in a microphone to hear sound remotely. You can also connect a speaker to be able to transmit audio to those near the camera (speaker is not included). It can trigger the capture of still images or video when motion or sound is detected as well as send an email. It can be setup to capture to a micro SD card (available separately). The sensitivity of the capture source can be adjusted. You can also wire up an alarm (available separately) to this unit and set it to sound when motion or sound is detected. View live footage on your Tablet or Smartphone in minutes.

Camera Specifications	QC-3844
Sensor	1/3" colour CMOS sensor
Horizontal resolution	720TVL@ 30fps
Minimum illumination	0.01 Lux
IR illumination	8 LEDs
Wireless Security	WEP, WPA, WPA2
Wireless Distance	50m (Clear Line of sight)
Effective IR range	Up to 12 metres
Lens	3.6mm lens, 90° angle
Power supply	12VDC (included)
Current draw	90mA (IR OFF), 400mA (IR ON)
Still Image Capture	1280 x 720pixels
Pan/Tilt angle	320° Pa, 120° Tilt
Dimensions	125(H) x 100(W) x 95(L)mm



NEW
2015

Wi-Fi
Enabled

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p HD Wi-Fi Pan Tilt Camera	QC-3844	\$179.00	\$160.95	\$151.95

720p HIGH DEFINITION PIR PINHOLE WI FI CAMERA

Housed within this PIR is a pinhole colour camera which records video in 720p high definition to a microSD card (available separately) or across your Wi-Fi network for you to watch on your Smartphone. Once movement is detected it will send an alert to your Smartphone. A discrete infrared LED helps illuminate a dark room, and there is a microphone and speaker built-in so you can communicate with the person in the room via your Smartphone. Suitable for almost any area which needs monitoring covertly, including stock rooms or to keep an eye on the babysitter. Supplied with a mains power adaptor.

Specifications	QC-3860
Supports	iPhone®, iPad®, Android®
Video format	AVI/M-JPEG
USB port	USB2.0
Remote control distance	10 metres
Recording time display	Available
Memory extension supported	up to 32GB
Night vision range	more than 8 metres
Dimensions	103(L) x 60(W) x 29(D)mm



NEW
2015

1
YEAR WARRANTY

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p HD Wi-Fi Pinhole Camera	QC-3860	\$179.00	\$160.95	\$151.95

WARNING!

Warning: These cameras should not be placed in areas where there is an expectation of privacy. Such places typically are: bathrooms, bedrooms, toilets, dressing rooms etc.. Use of these devices in such locations, can lead to criminal prosecution and severe penalties.

720p HIGH DEFINITION P2P WI FI CAMERA

This model features a 720p camera that produces a bright and sharp vision for you to survey the home or office. It features the latest (P2P) plug-and-play technology so it's very easy to setup. The audio is two way, so you can plug in a microphone to hear sound remotely. You can also connect a speaker to be able to transmit audio to those near the camera (speaker is not included). It can trigger the capture of still images or video when motion or sound is detected as well as send an email. It can be setup to capture video to a microSD card (available separately).



NEW
2015

1
YEAR WARRANTY

Specifications	QC-3842
Sensor	1/3" colour CMOS sensor
Sensor resolution (H x V pixels)	720 x 1280 at 30fps
Horizontal resolution	720TVL
IR illumination	12 LEDs
Wireless Security	WEP, WPA, WPA2
Wireless Distance	up to 50m
Effective IR range	Up to 12 metres
Lens	3.6mm lens, 90° angle
Power supply	12VDC (included)
Current draw	90mA (IR OFF), 400mA (IR ON)
Dimensions	125(H) x 100(L) x 100(W)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p HD Wi-Fi Dome Camera	QC-3842	\$179.00	\$160.95	\$151.95

DIY IP CAMERAS

WI FI REMOTE WIRELESS IP CAMERA

The smallest IP camera we've ever seen! With its wireless network interface, the Ai-Ball allows you to stream and record audio video images over your network or directly to your Smartphone (iPhone® or Android device) and laptop on the go. Powered by a CR2 battery and coupled with an incredibly compact design means you can easily carry the Ai-Ball around and even put it on your keychain! The Ai-Ball is supported by various mobile and PC applications that enhance and expand the your experience (including some iPhone® apps not included). Stream or record your videos from a remote location even when you are far away from your Ai-Ball (even while overseas) using its infrastructure WAN mode.



View live footage on a Smartphone

AI-BALL CRADLE + ADAPTORS

Includes:
Bracket for Ai-Ball (QC-3368)
USB mini B plug to A plug cable
Cigarette to USB power supply
Mains to USB power supply
Dimensions of bracket: 75(H) x 55(W) x 55(D)mm



Camera Specification	QC-3368
VGA	640x480, QVGA 320x240, QQVGA 160x120, up to 30fps
View Angle	60° / F2.8
Focusing	200mm to Infinity
Video Recorder	Motion JPEG
Typical bit rat (VGA)	standard (2500 kbps), high (1600 kbps)
Typical bit rat (QVGA)	standard (1100 kbps), high (800 kbps)
Typical bit rat (QQVGA)	standard (600 kbps), high (400 kbps)
Video Snapshot	JPEG
Wireless Interface	IEEE 802.11b/g 2.4GHz ISM Band
Wireless Security	WEP 64/128, WPA, WPA2
Wireless Range	Infrastructure: 20m (Typical), Adhoc: 7.5m (Typical)
Infrastructure	54Mbps, max. connection rate, Adhoc: 11Mbps, max. Connection rate (Note: Wireless performance varies with distance and access point usage.)
Antenna	Single, internal
Dimension	Weight 30mm(Diameter) x 35mm(L) / 100g
Voltage	3.0V
Power	Battery Operated - 750mAH (CR2)
Current consumption:	320mA (typical); 350mA (maximum)

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Wi Fi Camera	QC-3368	\$99.95	\$89.95	\$84.95
Cradle & Adaptor	QC-3369	\$29.95	\$26.90	\$25.45

HIGH DEFINITION P2P WI FI CAMERA

This HD camera with Wi Fi support allows you to set up a surveillance system without confusing cables. The P2P function makes it easy and simple to connect, without the need for confusing port mapping, DNS, and IP address settings. Using your Smartphone you can log in to view what is happening in your home or office anywhere, anytime! The camera features an IR-cut filter to provide a true colour experience, and can be easily configured to automatically email and/or upload images to an FTP server at defined intervals or when motion is detected. Supplied with mains power supply and supports up to 32GB microSD card (available separately).



Specifications	QC-3840
Image sensor	1/4" colour CMOS sensor
Viewing Angle	60°
Audio	Two way
Infrared light	8 IR LEDs with up to 15m night visibility
Resolution	1280 x 720 (720p), 640x480 (VGA), 320x240 (QVGA)
Power	5V/2.5A DC, 1.5m, 5W (Mains adaptor included)
Supports	iPhone®, iPad®, Android® Smartphone
Dimensions	125(H) x 100(W) x 95(L)mm

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p Wi Fi P2P Camera	QC-3840	\$159.00	\$142.95	\$134.95

720P RECHARGEABLE WI FI IP CAMERA

This small and portable Wi Fi IP camera is able to help you monitor your home to make sure it's safe and secure. Featuring a speaker, microphone and with its small size and easy installation, this video and audio capable IP camera works perfect using an Android® Smartphone, Apple® iPhone® or iPad®. It can also records video to a microSD card (available separately).



Specifications	QC-3854
Image sensor	1.3 MP CMOS/720p
Lens	Aperture (F2.5), Effective focal length (f=2.8mm), view angle: 110°
External memory	microSD, support microSDHC card up to 32GB
Interface	Micro USB
Power adaptor	5V/1A
Display resolution	1280 x 720 @ 15fps (default, up to 25fps), 640 x 360 @ 18fps (default, up to 25fps)
Software	Guard app. for Smartphone and Tablet (iOS®/Android®)
Dimensions	105(L) x 55(W) x 25(D)mm

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
720p Wi Fi Rechargeable Camera	QC-3854	\$99.95	\$88.95	\$84.95

TECH TALK!

WHAT IS AN IP CAMERA?

An IP camera is a networked digital camera that transmits data over a fast Ethernet link. IP cameras (also called "network cameras") are most often used for IP surveillance, a digitized and networked version of closed circuit television (CCTV).

The benefits of IP cameras over analogue technology include:

- Remote administration from any location
- Digital zoom
- The ability to easily send images and video anywhere with an Internet connection
- Progressive scanning, which enables better quality images extracted from the video, especially for moving targets

- Adjustable frame rates and resolution to meet specific needs
- Two way communications
- The ability to send alerts if suspicious activities are detected
- Lower cabling requirements
- Support for intelligent video

It should be noted that IP surveillance has greater complexity and bandwidth requirements.

COVERT SURVEILLANCE

8GB PEN VIDEO CAMERA - 720P

Maxwell Smart would have loved to have one of these to go with his shoe phone. Capture video, audio or still photos discreetly and quickly, then transfer them onto your PC via USB. The built-in memory stores up to 8GB, so there's plenty of capacity for taking electronic notes at your next meeting or protecting your legal rights by capturing a video or audio record of an event. It also functions as a conventional ballpoint pen.

- One-button operation
- Recharges via USB
- Record up to 1 hours of video
- Up to 2000 photos

Specifications	QC-8017
Format	AVI, JPEG
Encoding	M-JPEG
Resolution	1280 x 720 - 720P
Frame rate	30fps
Still image resolution	1600 x 1200 jpg
Dimensions	148(L) x 15(Dia)mm



- Black ink refill available separately - QC-8024

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
8GB Pen Camera	QC-8017	\$89.95	\$80.95	\$74.95
Spare Pen Refill - Black Ink	QC-8024	\$6.95	\$6.25	\$5.75

"SPY" WATCH WITH HIGH DEFINITION CAMERA RECORDER

Not only a full functional, quality and stylish watch, it also has a built-in high definition video recorder. On the dial of the watch lies the camera lens that is almost invisible to the naked eye. It will record at 1280 x 960 video resolution and 3264 x 2448 still images into the 4GB memory that is built-in. It also has a built-in microphone hidden on one of the knobs. Unit has an internal lithium battery that charges via the USB cable provided. Although the watch looks like a divers watch, the unit is not waterproof.

- Watch bezel measures 42(Dia.) x 15(D)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
4GB Watch Camera	QC-8070	\$89.95	\$80.95	\$74.95

HIGH DEFINITION VIDEO RECORDER HIDDEN IN "HOLLYWOOD DIRECTOR" STYLE GLASSES

The most realistic covert spy glasses we have come across. Other units available in the market are big and bulky and just look plain tacky. This 720p high definition digital video recorder glasses not only looks like a real set of spectacles, but it is also very stylish. The camera lens is virtually impossible to see located in the bridge of the nose of the ultra flexible frame. It has a built-in 8GB of memory, rechargeable battery and a discreet on and off switch.

- Recharge batteries by USB
- View angle 62 deg, 1 LUX
- USB 2.0 interface



Specifications	QC-8022
Video format	AVI
Recording time	70 mins continuous, 90 mins max
Video Resolution	640x480 / 1280x720 @ 30fps

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Glasses Camera	QC-8022	\$199.00	\$178.95	\$169.00

LCD CLOCK WITH HIDDEN 720P CAMERA

A full function LCD clock with a hidden 720p high definition camera. Set it up in an area of concern and it will detect motion then commence recording footage in high definition (1280 x 720) onto a microSD card. Playback the files on a computer using the supplied USB cable to see what really happened. An infrared remote control is also included so you can manually take pictures or trigger recording. It includes a rechargeable battery, which can be recharged from a USB port of a computer or USB adaptor with the supplied cables. It is a fully functional clock, with time, date, alarm and three brightness settings.

- A 4GB microSD card is included for up to 60 minutes of video or over 3000 images.

Specifications	QC-8660
Image Capture	1280 x 720
Battery Capacity	2100mA
Run time	Up to 2 hours
Viewing angle	90 degrees
Memory	4GB microSD card included (supports up to 32GB)
Dimensions	115(W) x 68(H) x 35(D)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
LCD Clock Camera	QC-8660	\$129.00	\$115.95	\$109.95

SMOKE DETECTOR WITH WI-FI VIDEO CAMERA RECORDER

Install this on ceilings for a subtle security measure. It looks like an ordinary smoke detector but inside is a video camera. Connect to the Wi-Fi of this "smoke detector" and you can view the goings on inside a room wirelessly via your Smartphone or internet browser. Features 2 x IR LEDs so will work at night as well.

- Free app available on iTunes® & Google Play

Specifications	QC-8074
Video resolution	1280 x 720 at 30fps
Wireless range	Up to 30m
Dimensions	116(Dia.) x 29(H)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Smoke Detector Camera	QC-8074	\$199.00	\$178.95	\$169.00

WALL CLOCK WITH WI-FI VIDEO CAMERA RECORDER

An ordinary looking analogue clock with a Wi-Fi video camera sitting behind one of the numbers. Ideal for covert surveillance. A free app is available which allows viewing of the video and recording on your Smartphone or Tablet. Perfect to place in retail environments where theft is common.

- Free app available on iTunes® & Google Play

Specifications	QC-8072
Video resolution	1280 x 720 at 30fps
Wireless range	Up to 30m
Dimensions	250mm Dia.



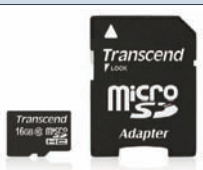
	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Wall Clock Camera	QC-8072	\$209.00	\$178.95	\$169.00

WARNING!

Warning: These cameras should not be placed in areas where there is an expectation of privacy. Such places typically are: bathrooms, bedrooms, toilets, dressing rooms etc.. Use of these devices in such locations, can lead to criminal prosecution and severe penalties.

LET'S FIND EVERYTHING YOU NEED!

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ECONOMY RANGE HOME AUTOMATION

You do not have to spend tens of thousands of dollars to create a smart home. With our new low cost range of Wireless Home Automation and Alarm system, you can create a fully automated system and only spend a few hundred dollars.

Simplicity and ease of use was in mind during the design; all sensors, controllers and switch modules are all wireless operating reliably on 433MHz frequency at a maximum range of 100m (line of sight). The main controller uses a very simple rotary switch for sensor and controller programming; very similar to what you see in expensive European systems, making system programming a breeze.

HOME AUTOMATION MAIN CONTROLLER

A powerful controller with built-in 16 wireless alarm zones and 16 wireless home automation control. Easily interfaces with a wide range of wireless security devices such as a PIR motion detectors, magnetic reed switches, light sensors and remote key fobs to protect your home and property. It also controls home automation devices such as mains 240V switcher module, 12V switcher module, light dimmer controller module, infrared controller and a wireless external bell box.

With the built in timer schedule programming, you are able to turn device(s) on or off automatically. E.g. Turn your lights on with the LA-5594 240V mains controller; turn your television or air conditioner with the LA-5597 Infrared controller at a specific time of the day or night.

Group programming is a handy feature for day to day activities. This allows you to turn up to a 5 output devices at once. Imagine coming home from work and opening your garage with the LA-5155 key fob remote control and the lights to your garage and living room, the television and air conditioner all turn at the same time. All you have to do is sit in your favourite couch and enjoy that ice cold beverage.

The Matrix or Scenes programming is a very powerful feature. It enables you to program wireless sensors to turn home automation device controllers on or off. Program the LA-5157 infrared sensor to turn a light on when activated. Set your LA-5598 light sensor module to open your curtains in the morning. The possibilities are endless and are limited to your imagination.

Main controller comes with a mains power adaptor with a provision for a 9V battery (not included) back for memory.

Although very affordable, the system incorporates very powerful features:

- 16 sector wireless alarm system
- 16 sector wireless home automation devices
- Timer schedule programming
- Group programming
- Matrix (Scenes) programming
- 100 Alarm event memory

SEE NEXT PAGE FOR ACCESSORIES TO SUIT



Specifications	LA-5592
Voltage input	12VDC
Wireless Range	100m line of sight
Wireless Frequency	433MHz



↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Main Controller	LA-5592	\$149.00	\$133.95	\$118.95
Key FOB Remote	LA-5155	\$24.95	\$22.35	\$19.70
PIR to suit	LA-5157	\$49.95	\$44.90	\$39.90

ENTRY LEVEL HOME AUTOMATION PACKAGE 1

We've put together an affordable home automation system package to help take out the guess work, and saves you money at the same time. The Home Automation Main Controller has 16 built-in wireless alarm zones and 16 wireless home automation controls. It easily interfaces with a wide range of wireless security devices such as a PIR motion detector, magnetic reed switch, light sensor and remote key fob to protect your home and property. Group programming is a handy feature for day to day activities. This allows you to turn up to a 5 output devices at once. The Matrix or Scenes programming enables you to program wireless sensors to turn home automation device controllers on or off. Main controller comes with a mains power adaptor (LA-5594). The wireless PIR (LA-5157) expands the capabilities of your Wireless Alarm System. Reed switches (LA-5158) are appropriate for monitoring doors, windows or other dry contact devices.

The package also includes 2 x AAA batteries for PIRs and 2 x AAA for the reed switch and a 9V battery (SB-2423) for the main controller's backup function.



PACKAGE INCLUDES:

1 x Wireless Home Automation Main Controller	LA-5592
1 x 240VAC Mains Controller	LA-5594
1 x Key Fob	LA-5155
1 x Wireless PIR	LA-5157
1 x Wireless Reed Switch	LA-5158
4 x AAA Batteries	SB-2413
1 x 9V Battery	SB-2423



↑	Cat.	Qty 1 +
Home Automation Package 1	LA-5591	\$249.00

240VAC MAINS SWITCH CONTROLLER

240VAC MAINS SWITCH CONTROLLER MODULE TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

A compact wireless 240VAC Mains switch module to interface with our Home Automation Controller. Designed to be hard wired to your GPO, wall switches or other mains device, it enable you to remotely activate any mains appliances. Turn lights on and off, motors, heaters via the home automation main controller and input devices such as PIR, Reed Switch, key fob remotes and light sensors.



Specifications	LA-5594
Voltage input	240VAC
Output Signal	NO or NC
Maximum Load	5A @ 240V
Wireless Range	100m line of sight
Wireless Frequency	433MHz

Note: A licensed electrician is highly recommended to hard wire this device into 240V mains wiring.



↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
	LA-5594	\$49.95	\$44.90	\$39.90

WIRELESS PIR SENSOR TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

Expand the capabilities of your LA-5592 Home Automation System with additional PIR detectors.

Specifications	LA-5157
Voltage input	Requires 2 x AAA batteries
Wireless Range	100m line of sight
Wireless Frequency	433MHz
Dimensions	1049H) x 60(W) 39(D)mm



↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
	LA-5157	\$49.95	\$44.90	\$39.90

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

LOW COST HOME AUTOMATION (CONTINUED)

12VDC SWITCH CONTROLLER MODULE TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

This controller module is good for switching 12V devices such as lamps, cameras, doors and garage. Control wireless via the LA-5592 Main Controller via Time schedule, manual and Matrix or pair with the LA-5155 Key Fob Remote Control for use as a wireless switch.

Specifications	LA-5595
Voltage input	12VDC
Output Signal	NO or NC
Maximum Load	3A @ 14V/ 2A @ 24V
Wireless Range	100m line of sight
Wireless Frequency	433MHz



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12V Switch Controller	LA-5595	\$69.95	\$62.95	\$55.95

WIRELESS INFRARED CONTROLLER TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

A learning infrared controller designed to mount on the roof to directly control your household appliances. It will learn your appliances infrared remote command and repeat when matched with a home automation input device. Turn on or off your air conditioner and television; open your curtains, etc. The infrared LED's are clustered in a 360 degree formation and will operate devices up to 150m² in size. Unit is supplied with a mains power supply.

Specifications	LA-5597
Voltage input	12VDC
Wireless Range	100m line of sight
Wireless Frequency	433MHz



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless IR Controller	LA-5597	\$99.95	\$89.95	\$79.95

WIRELESS IR SECURITY

WIRELESS BELL BOX TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

A wireless bell box designed to interface with the LA-5592 Home Automation Controller. Works as an audible and visual deterrent, the siren produces a wailing 94dB of output and a powerful strobe when alarm is activated. It is supplied with 240VAC mains power adaptor.

Specifications	LA-5579
Voltage input	12VDC
Wireless Range	100m line of sight
Wireless Frequency	433MHz
Sound Output	94dB @ 1m
Strobe Flash Rate	1Hz



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Bell Box	LA-5579	\$139.00	\$124.95	\$110.95

WIRELESS SOLAR DOORWAY BEAM TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

Pair this with our Home Automation Controller (LA-5592) to add an entry warning system to doorways, garages, driveways or hallways. This device is coupled with an amorphous solar panel to keep the doorway beams 4.8V Ni-MH battery pack charged, no need to worry about swapping out batteries or connecting up mains wiring. It will detect an interruption to the beam at up to 6m away which will trigger a warning on the main home automation controller. An ideal way to keep your entryways monitored.

- 4 x 500mAh 4.8V Ni-MH battery back

Specifications	LA-5593
Doorway width detection	0-6m
Transmission frequency	433MHz
Dimensions	71(W) x 65(L) x 44(H)mm
Solar panel dimensions	175(W) x 15(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Solar Doorbell	LA-5593	\$74.95	\$67.50	\$59.95

WIRELESS REED SWITCH TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

Use this wireless reed switch to trigger an alarm or siren. Used in conjunction with the Home Automation Main Controller LA-5592. Being wireless they are a breeze to install.

- A23 size battery required
- Measures 58(H) x 30(W) x 12(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Reed Switch	LA-5158	\$39.95	\$35.90	\$31.90

WIRELESS LIGHTING CONTROL

WIRELESS PIR SOLAR LIGHT SENSOR TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

Automated light triggering is a simple yet effective security feature for homes. This kit comes with an extremely bright LED attached to a wall or roof mountable PIR sensor. The PIR sensitivity can be adjusted across a range from day to night and the light mode can be switched between flashing mode, on for 20 seconds, on for 50 seconds, or off completely. An internal 6.0V Ni-MH battery pack can be recharged with the supplied amorphous solar panel.

This device can be paired with our Home Automation Controller (LA-5592) for even greater control.

- LED on/off indicator



Specifications	LA-5599
Detection range	6-7m
Transmission frequency	433MHz
Transmission distance	100m (line of sight)
Power supply	5 x 1.2AA rechargeable batter pack
Dimensions	237(H) x 150(D)mm
Solar panel dimensions	175(W) x 15(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Solar PIR	LA-5599	\$119.00	\$106.95	\$94.95

WIRELESS LIGHT SENSOR MODULE TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

This light sensor module will interface with the Home Automation system to turn an output device on or off. It has an adjustable light setting to detect the desired ambient light trigger. You can interface this with a 240V mains controller to turn a light on at dusk or a 12V controller to open the curtains at the first sign of light.

Specifications	LA-5598
Wireless Range	100m line of sight
Wireless Frequency	433MHz



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Light Sensor	LA-5598	\$49.95	\$44.90	\$39.90

240VAC MAINS LIGHT DIMMER MODULE TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

This compact 240VAC Mains Light Dimmer module remotely controls the intensity of your 240VAC lamps. It has 8 steps of light dimming, perfect for light mood setting when entertaining guests. Unit is only suitable for incandescent type bulbs.

- Note: A licensed electrician is highly recommended to hard wire this device into 240V mains wiring.

Specifications	LA-5596
Voltage input	240VAC
Maximum Load	5A @ 240V
Wireless Range	100m line of sight
Wireless Frequency	433MHz



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
240VAC Dimmer	LA-5596	\$49.95	\$44.90	\$39.90

HOME AUTOMATION PREMIUM RANGE

This is a term where digital technology is used to simplify or integrate aspects of home management. Most home automation is designed to combine previously separate tasks into a central command & control workstation, typically a touch screen or even just a keypad. A PC can also form part of such a system.

Typical tasks that home automation can integrate are: interior & exterior lighting, air conditioning, audio & video feeds, telephone management, along with integration of home security including keyless entry, etc.

Previously home automation was limited to large expensive homes. Up until now home automation components were hard wired inside walls using Cat5-type cabling.

It is now possible to achieve the same thing without expensive & disruptive cabling using high security, high reliability wireless technology.

We are proud to be the pioneer of Home Automation-in-a-box technology.

WIRELESS GATEWAY - HOME AUTOMATION CONTROLLER

- Have you ever dreamt of controlling your homes lighting and appliances remotely?
- Have you ever wanted to turn your homes lights and appliances off and activate your security system with the touch of one button?
- Have you ever been on holidays and wanted to check on your home via video and be updated via Email of any events?

SECURITY ALARM FUNCTION

- Real Time / Emergency Notifications Via Email
- Home Automation Control Timers, scene control, remote operation
- Video Surveillance IP cameras support for live video monitoring
- Cost Effective True wireless connectivity
- Easy Installation DIY simple installation.

SECURITY

Fully secure your home with the LA-5570 Wireless Gateway. Featuring a wide range of wireless accessories such as door and window switches, PIR motion detectors and smoke detectors. You can easily build up a fully secure home environment to protect your home, family and property. Use either the wireless digital pulse input or the analogue input modules to connect a range of hard wired security sensors.

REAL TIME EVENT / EMERGENCY NOTIFICATION

The LA-5570 Wireless Gateway provides real time email notification allowing you to be immediately informed of a break in or panic notification.

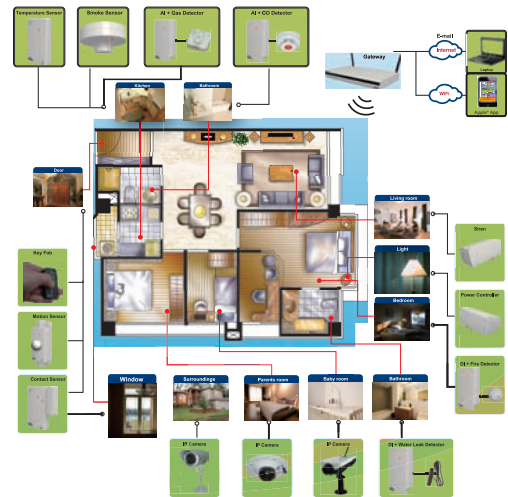
AUTOMATION

Your LA-5570 Wireless Gateway is more than a fancy security system. It offers total control of your home appliances, lighting and power outlets. The LA-5570 can control your entire home allowing you to monitor and control appliances remotely via your Smartphone or web browser.

WIRELESS LCD WITH PSU - LA-5572

The wireless remote keypad allows for complete configuration and programming the LA-5570 Wireless Gateway. Has the look and feel of a typical alarm keypad with the extra functionality of controlling your lighting appliances.

- Away Mode Full Arming for All Zones
- Stay Mode For Arming certain Zones for Night Mode
- Zone Bypass function
- Panic button Emergency Alarm Activation (Can send Email)
- Tamper switch Activates Alarm if removed from the wall when Armed
- Simple to use navigation menus
- Powered by 2x AA batteries and mains adaptor
- Simply mount on the wall with the supplied mounting plate
- Dimensions: 157(L) x 95(W) x 21.5(H)mm



TYPICAL WIRELESS HOME AUTOMATION SYSTEM MAP

VIDEO SURVEILLANCE

Need to check on the dog? Make sure the teenagers are behaving while out to dinner? Through the Web user interface or you Smartphone you can easily monitor and control your IP cameras, allowing you to easily monitor live video footage of your home anytime anywhere.

COST EFFECTIVE

Most professional home automation systems require your home to be pre wired costing many thousands of dollars just for the install! But with the LA-5570 Wireless Gateway, it can offer you the same level of functionality and its all DIY! The system uses premium wireless technologies such as Wi-Fi, Zigbee and 3GPP mobile technologies to provide a very cost effective DIY solution.

EASY INSTALL

The system uses premium wireless technologies such as Wi-Fi and 3GPP mobile technologies connecting all the devices such as the door sensors, PIR movement detectors, smoke detectors, temperature monitor, plug in appliance switch all remotely without wires. Providing a very cost effective, DIY solution.

Control using your
iPhone® or Android
Smartphone



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Wireless Gateway	LA-5570	\$299.00	\$269.00	\$239.00
Keypad Control	LA-5572	\$189.00	\$169.95	\$150.95

PROFESSIONAL HOME AUTOMATION PACKAGE 2

We have teamed up our professional home automation controller with a range of suitable accessories to help take out the guess work and save you some money at the same time. The included Main Alarm Controller enables you to easily build up a fully secure home environment to protect your home, family and property. It offers total control of your home appliances, lighting and power outlets. The package includes a 240VAC plug in mains controller that is able to remotely activate any mains appliances. The module is designed to be hardwired to a 230VAC source, which then connect up to devices such as lighting, mains switches and appliances which can then be controlled wirelessly. The package also includes a wireless PIR sensor that detects infra-red radiation in 95 degree up to a distance of 5 metres. The LA-5576 siren is designed to receive signals from Home Automation sensors. It can interface with wireless PIR detectors, reed switches and smoke detectors. This package also has 4 x AA Batteries (SB-2425) for siren, 2 x AAA Batteries (SB-2426) for PIR and 1 x CR2032 (SB-2522) for Reed switch.

NEW
2015

PACKAGE INCLUDES:

1 x Main Alarm Controller	LA-5570	1 x Siren	LA-5576
1 x 240V Mains Switch	LA-5578	4 x AA Batteries	SB-2425
1 x 240V Lighting Controller	LA-5575	2 x AAA Batteries	SB-2426
1 x PIR	LA-5582	1 x CR2032	SB-2522
1 x Reed Switch	LA-5584		



	Cat.	Qty 1 +
Home Automation Package 2	LA-5568	\$599.00

240VAC & 12VDC WIRELESS CONTROLLERS

WIRELESS MAINS CONTROLLER

A 240VAC plug in mains controller that is able to remotely activate any mains appliances. Turn lights on and off, motors, heaters, etc wirelessly via the Gateway or remote control devices.

Specifications	LA-5578
Power Supply	230VAC 50Hz
Resistive Load	6.4A
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	88(L) x 52(W) x 39(D)mm

Product may vary from image



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
240VAC Wireless Controller	LA-5578	\$119.00	\$106.95	\$94.95

WIRELESS 12VDC SWITCH CONTROLLER

A 12VDC Controller switch suitable for use with Garage doors and door strikes. It can also be used for switching other devices with a 12VDC control input such as lamps, cameras, etc. It has a magnet on the rear which enables easy fixture to metal surfaces.

Specifications	LA-5580
Power Supply	12VDC
Current	20mA
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	88(L) x 39(W) x 15(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
12VDC Wireless Switch	LA-5580	\$54.95	\$49.45	\$43.90

WIRELESS RELAY SWITCH TO SUIT LA-5592 HOME AUTOMATION MAIN CONTROLLER

Wireless relay switch which supports two D.I. (digital input) and two D.O. (digital output) interfaces. It supports bi-directional communication that allows you to receive or transmit signal with 3rd-party device by itself or interact with other UIS wireless devices.

- Features LED indicators for inputs and outputs, and screw terminals for easy wiring.
- Power supply included

Specifications	LA-5577
Voltage input	12VDC
Wireless range	100m line of sight
Wireless frequency	433MHz
Max loading	10A (12VDC) Note: Not mains rated
Dimensions	88(L) x 39(W) x 15(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Relay Switch	LA-5577	\$149.00	\$133.95	\$118.95

WIRELESS LIGHTING CONTROLLER

WIRELESS 240VAC LIGHTING CONTROLLER

Essentially a remote control relay that will allow control of up to two lights wirelessly. Plug it into a 230VAC source (or you can wire it in) then connect up to 2 lights and they can be remotely controlled.

- Not limited to lights, it could be used for switching any number of household devices.



Specifications	LA-5575
Voltage	240VAC
Communication range	100 Metres
Protocol	2.4GHz UIS
Dimensions	132(L) x 67(W) x 27(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
240VAC Wireless Light Controller	LA-5575	\$69.95	\$62.95	\$55.95

WIRELESS SECURITY & FIRE CONTROL

WIRELESS PIR SENSOR

Our new range of Home Automation products also integrates alarm monitoring functionality. This Wireless PIR sensor further expands the capabilities of our Home Automation range by offering reliable motion detection. Like all PIR detectors, this unit detect infra-red radiation in 95 degree up to a distance of 5 metres. Uses 2 x AA batteries and has energy saving mode.



Specifications	LA-5582
Power Supply	2 x AA (not included)
Detection	Passive Infra-red
Communication range	100 metres
Protocol	2.4GHz UIS
Dimensions	92(L) x 34(W) x 34(D)mm

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless PIR	LA-5582	\$79.95	\$71.95	\$63.95

WIRELESS MAGNETIC REED SWITCH

This compact wireless reed switch interfaces with our Home Automation system allowing entry protection from windows and doors. Supplied with a mounting bracket for the main wireless switch, the magnet screws onto door or window frames. Also has power saving mode which enables the battery to last up to 2 years.

Specifications	LA-5584
Power Supply	CR2032
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	65(L) x 34(W) x 15(D)mm Main 70(L) x 12(W) x 15(D)mm Magnet



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Reed Switch	LA-5584	\$64.95	\$58.50	\$51.95

WIRELESS SMOKE SENSOR WITH SIREN

A complete wireless photoelectric smoke detector with a built in buzzer providing audible warning. A highly reliable sensor which provides a complete solution to fire prevention and safety. Supplied with mounting hardware for roof mounting. Powered by 2 x AA batteries and has power saving mode for 2 years of operation.

Due September

Specifications	LA-5587
Power Supply	2 x AA (not included)
Detection	Passive Infrared
Communication range	100 metres
Protocol	2.4GHz UIS
Siren Output	90dB @ 1m
Battery life	2 years
Dimensions	100(Dia) x 43(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Smoke Sensor	LA-5587	\$89.95	\$80.95	\$71.95

WIRELESS SIREN

A 240V AC plug in siren designed to receive signals from our range of Home Automation sensors. Unit can interface with wireless PIR detectors, reed switches and smoke detectors. Has a sound output of 85dB and also an LED visual indication on the front panel.

Specifications	LA-5576
Power Supply	240VAC 50Hz
Sound Output	90dB @ 1 metre
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	88(L) x 52(W) x 39(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless Siren	LA-5576	\$99.95	\$89.95	\$79.95

REMOTE CONTROL

Miniature and slim line 3 button key fob remote control for use with our range of Home Automation devices. Quickly arm and disarm sensors, turn on lights, open doors and also integrates a panic button for emergencies.



Buttons, arm, disarm and panic

Specifications	LA-5573
Power Supply	CR2032
Communication range	100 metres
Protocol	2.4GHz UIS
Battery life	2 years
Dimensions	64(L) x 30(W) x 13(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Remote Control	LA-5573	\$59.95	\$53.95	\$47.90

BUY IT ON THE WEB...

Shop for all these Jaycar Electronics products online at our website - and check out our latest products and special offers!



WIRELESS ALARM SYSTEMS

8 ZONE WI FI ALARM KIT WITH APP

This 8 Zone Wi Fi and cloud controlled alarm system is very easy to install, and can be controlled easily via the touch screen, using a wireless key-fob or by your Smartphone over a wireless network. Once dialled, the recipient can then listen in and even broadcast their voice over the control unit to scare away the trespasser, simultaneously triggering the built-in siren. The wireless PIR and Reed switches are mounted using 3M double sided tape. An ideal security system if you are renting or where it is difficult to run wiring through the premises. A Wi-Fi network is required.

- App controlled (suits Android and iOS®)
- Cloud enabled home-security system with full control from Smartphone
- Smart touch panel and easy to use
- Push notifications, Email alerts
- Dimensions: 163(W) x 132(L) x 30(D)mm

PACKAGE INCLUDES:

- 1 x Smart touch panel with rechargeable battery
- 1 x Wall/desk mount bracket with mounting hardware
- 1 x PIR motion sensor with magnetised mounting bracket & batteries
- 2 x Slim door/window sensors with batteries
- 1 x Wireless key fob remote with battery
- 1 x Mains adaptor

View live footage on a Smartphone



ACCESSORIES TO SUIT

720P WI FI IP CAMERA FOR LA-5610 WI FI ALARM - LA-5620

This is a 720p high definition wireless IP Camera that suits LA-5610 8 Zone Wi-Fi Alarm Kit with App. The camera features pan and tilt rotation with IR night vision LED's. It also supports mobile phone remote viewing and motion detection so that when the alarm is triggered it will send an alert to your phone and simultaneously brings up the camera footage live so that you can see what's happening!

- Dimensions: 125(H) x 100(W) x 95(L)mm



LA-5620

SPARE WIRELESS PIR SENSOR FOR LA-5610 WI FI ALARM - LA-5614

Will alert wireless home alarm when movement is detected. It is ideal for wide spaces such as rooms, hallways, stairwells, sheds, front and back doors. Features power-saving with 3 minutes motion lockout after each detection to preserve battery life. It has 120 degree wide angle detection and features low battery warning. It comes with a PIR motion sensor, all-directional magnetic mounting bracket, which can be mounted using the supplied 3M double-sided tape or included mounting screws.

- Power: Includes 1 x CR123A Lithium battery
- Dimensions: 65(L) x 49(W) x 36(D)mm



LA-5614

SPARE WIRELESS REED SWITCH FOR LA-5610 WI FI ALARM - LA-5616

Will alert the wireless home alarm when a door or window is opened. Ideal to use on windows and doors of your garages, cabinets, sheds, attics, side doors and freezers. It has magnetic sensor that can be mounted on right or left side of door or window. Features low battery warning. It comes with a window sensor and a double-sided tape.

- Power: 2 x AAA batteries included
- Dimensions: 75(L) x 20(W) x 20(D)mm



LA-5616

SPARE WIRELESS KEY FOB REMOTE FOR LA-5610 WI FI ALARM - LA-5618
Compact remote control for the Wi-Fi Alarm. This 5 buttons remote features 3 modes and a socket function to turn the home appliance ON and OFF. It has an excellent transmission range. CR2032 Lithium battery is included.

- Power: 1 x CR2032 Lithium battery included
- Dimensions: 55(L) x 37(W) x 9(D)mm



LA-5618

	Cat.	Qty 1+	Qty 2+	Qty 4+
8 Zone Wi Fi Alarm Kit	LA-5610	\$299.00	\$269.00	\$239.00
ACCESSORIES TO SUIT LA-5610 WI FI ALARM	Cat.	Qty 1+	Qty 2+	Qty 4+
Wi-Fi IP Camera to Suit	LA-5620	\$129.00	\$115.95	\$102.95
Spare PIR - Wireless	LA-5614	\$39.95	\$35.90	\$31.90
Spare Reed Switch - Wireless	LA-5616	\$29.95	\$26.95	\$23.70
Spare Keyfob	LA-5618	\$29.95	\$26.95	\$23.70
Spare External Siren	LA-5159	\$99.95	\$89.95	\$79.95

DONT FORGET THESE!

SOLAR POWERED MINI WINDOW ALARMS

Cost-effective and simple security measure. Use one or more as a stand-alone option or as an addition to an existing electronic security setup. Simply peel the clear backing from the self-adhesive mount and position on the inside of a window - no tools required. The solar cell keeps the built-in Ni-MH battery charged & if triggered, the very loud alarm sounds. Two types are available. Suitable for windows, French doors, sliding glass doors and pane glass doors.

- Warning sticker included
- No wiring
- Never needs batteries
- Self-adhesive
- Size: 70(W) x 82(H) x 8(D)mm

Fits on inside of windows

NEW LOW PRICE

3 YEAR WARRANTY



MINI GLASS BREAKAGE/ VIBRATION Cat LA-5003
MINI MAGNETIC ENTRY Cat LA-5005

	Cat.	Qty 1+
Glass Break / Vibration Alarm	LA-5003	\$7.95
Magnetic Entry Alarm	LA-5005	\$4.95

LARGE ALARM STICKER

For trucks, caravans, houses, offices and factories. Where a larger and more prominent deterrent sticker is required.

- Sticks to outside of window.
- Measures: 120 x 80mm

SEE PAGE 439 FOR VIDEO SURVEILLANCE DETERENT STICKERS



	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5102	\$2.95	\$2.60	\$2.30

HOME ALARM SYSTEMS - WIRELESS

WIRELESS ALARM SYSTEMS

8 ZONE WIRELESS ALARM KIT WITH REMOTE CONTROL

This advanced Wi-Fi home alarm system is an easy-to-use system that allows you make sure your home or office is secure at all times. The system connects via Wi-Fi to your home modem/router so it can send a push notification once it's triggered back to your Smartphone with the freely available App. If the smart panel detects a security breach, the system's indicator lights and audible alarms are triggered which then sends a push notification, SMS or email to your iOS® or Android® Smartphone.

- 8 security zones and 4 operation modes (alarm/alert/home/standby)
- Quick and easy installation via the Smartphone app, Smart phone app available on iTunes® or Google Play®
- Control from smart panel or key fob remote control (included)
- Back-up battery and low-battery notification
- 120dB+ siren
- Battery requirement:
 - 2 x 9V alkaline batteries for smart panel and motion sensor required
 - 2 x AAA alkaline batteries for door/window sensor required
 - 1 x 12V alkaline battery for key fob remote control required
- Dimensions of main unit: 150(W) x 95(L) x 31(D)mm



1 YEAR WARRANTY



↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
8 Zone Wireless Alarm	LA-5280	\$99.95	\$89.95	\$79.95
↑ Accessories to suit	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Additional Wireless Reed Switch	LA-5147	\$32.95	\$29.45	\$26.45
Additional Wireless Keyfob Remote	LA-5149	\$29.95	\$26.90	\$23.70
Wireless Indoor 120dB Siren	LA-5142	\$39.95	\$35.90	\$31.90
Wireless PIR Sensor	LA-5146	\$39.95	\$35.90	\$31.90
Red Wireless Bellbox / Siren	LA-5159	\$99.95	\$89.95	\$79.95
Smart Control GSM Dialler for LA-5280 Alarm Kit	LA-5164	\$199.00	\$178.95	\$158.85

8 ZONE WIRELESS ALARM KIT WITH TELEPHONE DIALLER

This stylish alarm panel with backlit LCD mounts to the wall and can be controlled via its keypad, supplied with a key-fob remote or control it from your Smartphone using the freely available 'Smart Halo' App. The included PIR motion sensor and two door/window sensors are battery powered and transmit wirelessly to the panel from up to 100m away (open area). Once the system detects a security breach, indicator lights will flash and the built-in 120dB siren will become active. If you connect the panel to a telephone socket (2m cable included) the panel can automatically dial up to 8 phone numbers and play a pre-recorded message that you record yourself. After the message plays the recipient can disable the alarm, or communicate with the intruder or person in distress in the house using the microphone and speaker built into the panel.

Other features include 4 operating modes (Standby, Armed, Alert and Home) and battery backup. Easily expand the system with additional sensors and accessories available separately.

- Quick and easy set-up with your Smartphone app
- Intuitive DIY system
- Wireless design
- Built-in phone dialler
- Automatic emergency calls up to 8 pre-set telephone lines
- Sensitive microphone for callers from 30ft away

KIT INCLUDES:

- 1 x Smart panel with LCD and keypad
- 2 x door/window sensors with mounting hardware
- 1 x motion sensor with mounting hardware
- 1 x key fob remote control with battery

Specifications	LA-5290
Power source	Mains adaptor with 1.8m cable included
Backup power	Requires 1 x 9V battery
Sensor numbers	Unlimited
Operating frequency	433.92MHz +/-0.5MHz
Siren output	120dB (Duration-adjustable)
Sensor range	Up to 100m (open area)
Panel dimensions	190(L) x 115(H) x 35(D)mm

Not available in New Zealand



MOTION SENSOR - CAT LA-5146

- Power source: 1 x CR123A battery included
- PIR detection angle: 100 Degrees
- PIR detection range: 13m, 8m, 5m
- Power saving mode: Yes
- Dimensions: 65(H) x 60(D) x 52(W)mm

DOOR/WINDOW SENSOR - CAT LA-5147

Mount using supplied double-sided tape or mounting screws

- Power source: 2 x AAA alkaline batteries included
- Dimensions: 85(H) x 42(W) x 14(D)mm

KEY FOB REMOTE CONTROL - CAT LA-5149

Includes Panic button

- Power source: 1 x 12V alkaline battery included
- Dimensions: 60mm long



1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
8 Zone Wireless Alarm Kit with Dialler	LA-5290	\$169.00	\$151.95	\$134.95
↑ Accessories to suit	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Additional Wireless Reed Switch	LA-5147	\$32.95	\$29.45	\$26.45
Additional Wireless Keyfob Remote	LA-5149	\$29.95	\$26.90	\$23.70
Wireless Indoor 120dB Siren	LA-5142	\$39.95	\$35.90	\$31.90
Wireless PIR Sensor	LA-5146	\$39.95	\$35.90	\$31.90
Red Wireless Bellbox / Siren	LA-5159	\$99.95	\$89.95	\$79.95
Smart Control GSM Dialler for LA-5290	LA-5164	\$199.00	\$178.95	\$158.85

WIRELESS ALARM SYSTEMS (CONTINUED)

8 ZONE WIRELESS GSM ALARM KIT WITH IPHONE® APP

A beautifully designed and finished alarm system, featuring a built-in GSM dialler that allows monitoring, arming disarming via SMS or through the application software for your Smartphone device. Simply download the App from the iTunes® store and you are able to securely and remotely control your alarm system in your home or office. Being wireless it's also very easy to install. Forget on-going expensive back to base solutions, this system only requires an active sim card. Up to 50 wireless sensors, 10 remote controls and two wired connectors can be connected to the system. It has a built-in 7.2V 1,000mAh battery back up that will continue to power the alarm panel up to 16 hours if ever disconnected from mains power. Also has a powerful internal siren that can produce 110dB when triggered, or control 2 (NO and NC) outputs to deter intruders. The system also has alerts for low battery of detectors, power lost and power recovery.

KIT INCLUDES:

1 x Control Panel
1 x Wireless PIR Detector
1 x Wireless Reed Switch
1 x Remote Control
1 x Control Panel Power Adaptor
Hardware Accessories and Manuals



LA-5242



LA-5244



LA-5240

Specifications	LA-5240
Input Voltage	10VDC/1,000mAh
Standby Current	80mA
Alarm Max Current	1500mA
Internal Battery	72.V/1,000mAh
Internal Siren	110dB
Remote Controls	10 Maximum
Wireless Sensors	50 Maximum
Frequency	433MHz
Dimensions	180(W) x 126(H) x 21(D)mm

OPTIONAL ACCESSORIES:

ADDITIONAL WIRELESS PIR SENSOR TO SUIT LA-5240

LA-5242

ADDITIONAL WIRELESS MAGNETIC REED SWITCH TO SUIT LA-5240

LA-5244

Specifications	LA-5242	LA-5244
Power Supply	3V 2 x AA Batteries	3V 1 x AA Batteries
Standby Current	80uA	155uA
Alarm Current	less than 11mA	less than 43mA
Range	80m line of sight	
Frequency	433mHz	
Dimensions	50(W) x 90(H) x 33(D)mm	

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
8 Zone Wireless GSM Alarm Kit	LA-5240	\$249.00	\$225.00	\$198.95
Wireless PIR Detector	LA-5242	\$49.95	\$44.90	\$39.90
Wireless REED Switch	LA-5244	\$49.95	\$44.90	\$39.90

9 ZONE INTELLIGENT GSM WIRELESS ALARM SYSTEM

Security systems are only good if they can alert someone when they're tripped, and even the loudest siren is quiet as a mouse if nobody is nearby to hear it. Sure, you can subscribe to a monitoring service, but they can be very costly. This brilliant system incorporates a quad band GSM module to notify you by phone and SMS when the alarm is triggered.

Easy to set up and to operate, utilising wireless PIR detectors and reed switches, so there is virtually no wiring at all. Fully featured with up to nine zones, remote arm and disarm function and battery backup. This system allows you to cater for all your security needs in one system while giving you peace of mind. Supplied with the alarm control unit, loud 120dB siren, a wireless PIR detector and wireless reed switch and one wireless remote controls.

- Alarm trip notification via GSM network - no phone lines required
- Notifies up to three programmed numbers by phone and SMS
- Wireless PIR and reed switch units - no wiring required
- Alarm response time less than 10 seconds
- Up to 9 separate zones
- Battery backup in case of power failure
- Mains power supply included

Cat. LA-5156

ADDITIONAL WIRELESS REED SWITCHES TO SUIT LA-5156

Cat. LA-5158

KIT INCLUDES:

- Wireless alarm panel
- 1 x external siren
- 1 x wireless remote controls
- 1 x wireless PIR
- 1 x reed switch

TECH TALK!

Will require an active GSM SIM card to operate dialler function.

Specifications	LA-5156
Wireless Range	50m
Standby Battery	9VDC (provides up to 15 hours standby backup)
Alarm Panel	119(H) x 176(W) x 29(D)mm
Wireless Reed Switch	71(H) x 50(W) x 16(D)mm (combined excl. aerial)
Wireless PIR	104(H) x 60(W) x 39(D)mm (excluding aerial)
Wireless key fob	58(H) x 30(W) x 12(D)mm (excluding aerial)

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
9 Zone Wireless Alarm System	LA-5156	\$219.00		
Additional Wireless Reed Switches	LA-5158	\$39.95	\$35.90	\$31.90

THINGS YOU MAY ALSO NEED...

ALARM PANEL ACCESSORIES

ALARM RELAY MODULE 2 X 15A

When it comes to large alarm installations, there is often a requirement to have several sirens and strobe lights. In order to do this safely, the best way is to use an isolated relay module. This enables you to supply an external power source so as not to overload the power supply on the alarm panel and switch high currents to multiple sirens and strobe lights.

- 15A Switching current
- Easy connection via wire terminals
- NO and NC contacts
- Isolated to protect the alarm panel
- Relay coil protection for spike free operation



	Cat.	Qty 1 +	Qty 4 +	Qty 8 +
	LA-5558	\$19.95	\$17.70	\$15.70

ALARM POWER SUPPLIES

16VAC 1.25 AMP ALARM SUPPLY

Designed for use with many house alarm panels. Supplied with three metres of cable for connection to alarm.

- Terminated with bare ends
- Dimensions: 55(W) x 90(H) x 60(D)mm



⬆ Voltage(AC)	Current(A)	Approval	Cat.	Qty 1 +	Qty 5 +	Qty 10 +
16	1.25	N13057	MP-3021	\$24.95	\$22.35	\$19.70

17VAC 1.25 AMP - EARTH CONNECTED

This has the earth pin wire connected. This is used for alarm panels that have an inbuilt dialler, as Austel require earthing due to it being connected to the telephone system.

- Terminated with bare ends



⬆ Voltage(AC)	Current(A)	Approval	Cat.	Qty 1 +	Qty 5 +	Qty 10 +
17	1.25	N13057	MP-3022	\$24.95	\$22.35	\$19.70

HOME ALARM SYSTEMS - WIRED

WIRED ALARM SYSTEMS

4 SECTOR ALARM SYSTEM WITH 2 WIRE TECHNOLOGY

At last a user friendly 4 sector alarm system that is easy to set-up and provides exceptional levels of security. The system utilises two-wire technology to ensure simple set-up that the DIY enthusiasts will love. The control unit has a built-in keypad with status LEDs and a three modes of operation (Home, Out, Off). All sensors and sounders are line-protected so any attempt to interfere will sound the alarm.

Set up multiple sectors which can be monitored or enabled independently (eg. upstairs/downstairs or house & garage etc.)

- All system components (sensors, sirens) are connected to the control unit via a two-core non-polarised wire
- Low battery and tamper attempts will be indicated by the status LEDs
- Push button "Home", "Out", and "Off" mode operation or "Home" and "Out" modes are pre-programmed for user convenience
- Door chime function is available when system is not armed
- Short circuit tamper attacks to any sector sensor will trigger the alarm
- Individual sectors can be set to "Home-Bypass" or "Bypass"; for example, the upstairs detectors can be set to "Home-Bypass" at night
- Two PIR motion detectors can be connected to each PIR sensor circuit
- The system can be expanded to have four PIRs as well as many magnetic contacts

KIT INCLUDES

- Control Unit
- 4 x Reed Switches
- 50m two-core flat cable
- Mount Hardware
- 2 x PIRs
- External Siren
- 240V adaptor

Specifications - PIR	LA-5476
Type:	Dual Pyroelectric element with hemispherical lens and new two-wire technology
Housing:	ABS
Adjustments:	Pulse count (1, 2 or 4)
Test LED:	Selectable (on/off)
Mounting Height:	2 - 2.5m
Detection Range:	Up to 15m
Size:	105(H) x 65(W) x 45(D)mm

Specifications - Door/Window Contact Detector	
Type:	Magnetically - actuated switch
Housing:	ABS
Size:	67(H) x 13(W) x 12(D)mm

Specifications - External Siren Unit	
Type:	Piezo electronic external siren
Housing:	ABS
Siren Output:	110dB min. at 1m
Size:	180(H) x 113(W) x 47(D)mm

2 WIRE PIR TO SUIT LA-5475 - CAT LA-5476

This 2 wire PIR is a dual-element passive infrared intrusion detector for use in electronic security systems. It is compact, attractive and easy to install. It can be mounted indoors in a corner and is ideal for commercial, office and residential installation. The unit detection is via monitoring changes in infrared energy patterns.



Specifications - Control Unit	LA-5475
Type:	Microprocessor based control unit with new two-wire technology
Housing:	ABS
Sectors:	4 Alarm Sectors (Expandable by connecting 2 PIRs to each of Sectors 3 and 4)
Entry/Exit Delay:	15, 30, 45 seconds programmable
Siren Duration:	1, 3, 10 minutes programmable
Siren/Strobe Outputs:	12V
Size:	160(H) x 185(W) x 35(D)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
4 Zone Alarm System	LA-5475	\$149.00	\$133.95	\$118.95
2 Wire PIR	LA-5476	\$29.95	\$26.90	\$23.70
PIR Lens - Lens Curtain	LA-5473	\$6.95	\$6.25	\$5.50

10 ZONE ALARM PANEL WITH LCD CONTROLLER

Fully configurable and programmable, this alarm kit gives you complete control over a professional system for home or business. Supplied with a central controller with LCD screen and the sensors you need to get a basic system up and running. You can then add sensors and functionality as required. Up to four remote keypads can be installed at up to 100m range and each can be named for easy identification. Each user can be programmed with any of four access level codes. Any zone can be programmed for security, PA, fire or 24 hour tamper and can be fully or partially armed. All the engineering codes and memory functions are protected by a non-volatile memory in case of power failure. An LED keypad is also available for a more affordable option compared to LCD.

- 10 programmable zones
- 4 access levels
- Walk test mode
- Events memory in keypads
- Programmable timers for entry, exit & alarm duration

KIT INCLUDES

- 1 x Control panel
- 4 x PIR sensors
- 1 x Bellbox
- 1 x 12V 1.2Ah backup battery
- 1 x LCD remote controller
- 2 x Reed Switch
- 2 x 50m 6 core cable
- 1 x Internal siren



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
10 Zone LCD Alarm Kit with 4 PIRs	LA-5562	\$439.00	\$395.00	\$349.00
LCD Remote Controller	LA-5563	\$49.95	\$44.90	\$39.90
	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
PIR Sensors to suit LA-5562	LA-5564	\$29.95	\$26.90	\$23.70

WIRED ALARM SYSTEMS (CONTINUED)

10 SECTOR INTELLIGENT ALARM SYSTEM WITH OPTIONAL DIALLER

Fully configurable and programmable, this professional alarm panel is the most advanced version of our 10 zone alarm controllers. Boasting an impressive range of features above our standard alarm systems, the LA-5368 alarm panel gives you everything required for advanced alarm installations. Standard features include support for up to four individual named keypads at a maximum range of 100m from the controller, four access levels of user codes with flexibility to program any zone as security, PA, fire or 24 hour tamper. Advanced features include more programming flexibility during installation and support for optional accessories; wireless sensor adaptor and GSM dialler. As this panel is designed with the flexibility to suit the requirements of many different installations, it is supplied as a control panel only. Additional components, sensors and accessories are available to cater for specific applications.

Cat. LA-5368

Suitable accessories - sold separately:

- LED Keypad Cat. LA-5561
- LCD Keypad Cat. LA-5563
- GSM Dialler Module Cat. LA-5369
- Wireless Sensor Adaptor Cat. LA-5367
- 12V 1.3Ah Backup Battery Cat. SB-2480
- Suits standard PIR and Reed switches

LA-5368



WIRELESS SENSOR ADAPTOR FOR LA-5368

Connect this module to the LA-5368 Intelligent 10 Sector Alarm System to convert the wired zones into wireless to allow integration of remote control key fobs and wireless sensors to the alarm system. Ideal for businesses and residences with detached workshops or garages. Also works well for rooms, which are unable to be reached by cables. Unit is powered from the LA-5368 alarm panel. Sensors and key fobs sold separately.

- Dimensions: 150(H) x 100(W) x 30(D)mm
- Cat. LA-5367

GSM INTERFACE MODULE FOR LA-5368 ALARM SYSTEM

Don't leave your alarm screaming for attention when you can't hear it! This powerful unit interfaces with the LA-5368 8-sector alarm system to enable even more features. The unit allows the alarm system to receive commands and send notifications via SMS over the GSM network. It can store up to three mobile phone numbers, which are then notified if the alarm is triggered. A great feature is the remote arm/disarm function. It allows you to send an SMS (from an authorised number) to arm and/or disarm the panel remotely. No worrying about "Did I turn the alarm on?" when you head on holidays, or late night trips to the office to check it's secure. Simply send an SMS and it's done!

- Features tamper protection, and is powered by the LA-5368 alarm system.
- Cat. LA-5369



LA-5369

NEW
LOW
PRICE



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
10 Zone Intelligent Alarm System	LA-5368	\$79.95	\$71.95	\$63.95
Wireless Sensor Adaptor	LA-5367	\$49.95	\$44.90	\$39.90
GSM Dialler Module	LA-5369	\$249.00	\$225.00	\$198.95
Wireless Reed Switch	LA-5152	\$9.95		
Remote Control Key Fob	LA-5155	\$24.95	\$22.35	\$19.70
	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
LED Keypad	LA-5561	\$39.95	\$35.90	\$31.90
LCD Keypad	LA-5563	\$49.95	\$44.90	\$39.90
	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
12V 1.3Ah Backup Battery	SB-2480	\$19.95	\$17.70	\$15.70

STAND-ALONE ALARMS

SHED ALARM

Simple and effective garage or shed alarm. Consisting of a keypad and single reed switch for a door or window and 5m of cable for easy DIY installation. It can be used as an instant alarm, with an entry delay or as a door chime to announce entry.

- Powered by a single 9V battery. (not included)
- Dimensions: 162(H) x 85(W) x 32(D)mm

KIT INCLUDES:

- Keypad • 5m cable • 1 x reed switch



NEW
LOW
PRICE



	Cat.	Qty 1 +
Shed Alarm	LA-5214	\$9.95

MOTION ACTIVATED ALARM WITH REMOTE CONTROL

Avoid messy wiring and protect your belongings with ease using our battery operated, motion activated alarm. The PIR sensor provides 120° coverage, triggering a 120dB+ alarm when breached. Use the remote control to arm or disarm the alarm. Flick the switch to chime and be notified as people enter or leave your room. It is a simple but effective deterrent against intruders.

- Remote control to arm or disarm the alarm unit
- A delay feature to give you time to leave the room
- 120dB+ alarm
- 120° coverage
- Easy to install mounting bracket
- The alarm unit requires 3 x AA batteries (not included)
- The remote control includes 1 x CR2032 battery
- PIR Sensor Dimension: approx. 114(L) x 61(W) x 29(D)mm
- Remote Dimension: approx. 64(L) x 32(W) x 7(D)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Motion Activated Alarm	LA-5217	\$34.95	\$31.45	\$27.90

PRESSURE ACTIVATED MAT ALARM WITH SIREN & STROBE

Easy to install and maintain, simply slide the pressure sensitive pad under your door mat to be notified of guests when they arrive at your front door or to surprise and deter would-be intruders. The alarm unit is battery operated and supplied with a mounting bracket. Flick the switch to chime when you are at home, flick it to alarm when you are away.



- Super loud 120dB+ siren
- Red strobe light
- Toggle switch, off/chime/alarm
- Requires 1 x 9V Alkaline Battery (not included)
- Lead length: 4m
- Mat dimension: approx. 488(L) x 331(W)mm
- Buzzer dimension (without bracket): approx. 97(L) x 54(W) x 33(D)mm



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Pressure Alarm	LA-5218	\$34.95	\$31.45	\$27.90

WATER LEAKAGE ALARM

Protect your home and property from flooding. This stand alone device will alarm when it detects a water leak, making it ideal for areas prone to flooding or leaks such as laundry rooms, kitchens, bathrooms and hot water tanks. The sensor mounts easily to metal surfaces with its built-in magnet, and double-sided tape secures the alarm into position. Also features a battery test button and low battery indicator.



- Weather resistant sensor
- Loud 120dB siren
- 2 x AAA alkaline batteries required
- Dimensions: 70(Dia) x 15(H)mm

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Water Leakage	LA-5163	\$9.95	\$8.75	\$7.75

ALARM SWITCHES & SENSORS

PIR DETECTORS

DUAL & QUAD ELEMENT PIR DETECTORS

Reliable and effective dual and quad element PIR detectors for home or office security applications. Both units are compact, attractive and easy to install with the features to match. Each has a built-in automatic temperature compensation to help eliminate false triggers in certain environments. 110 degree convex honey comb hemispherical infrared lenses are used and each unit has an extremely low current draw at 8mA. Both feature a swivel bracket for quick position adjustment. This quad unit offers higher levels of detection than the dual element model.

- Detection type: Dual element low noise pyroelectric sensor
- LED indicator: Walk test enabled by internal link
- Tamper switch

Specifications	
Operating voltage	9-15VDC
Current draw	8mA nominal at 12VDC
Range	12m max
Field of view	110 degrees max
Mounting height	1.5m-2.4m
Alarm output	NC, when cover on, 28VDC 0.1A
Warm up period	90 seconds
Pulse count	1, 2 and 4 pulses selectable
Dimensions	104(H) x 66(W) x 47(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 8+
Dual	LA-5044	\$29.95	\$26.90	\$23.70
Quad	LA-5046	\$34.95	\$31.45	\$27.90

SHOCK SENSORS

INTELLIGENT SHOCK SENSOR

This vibration/shock sensor has an intelligent microprocessor. The sensitivity is automatically set in Learn Mode by the level of a recognised impact made to the protected area. The number of impacts i.e. pulse count required to generate an alarm is determined by the number of the recognised impacts made in Learn Mode. Fast and easy to install and can be mounted to wood, steel, glass, and concrete.

Specifications	LA-5073
Supply Voltage	9V - 16V DC
Current: Normal Mode	16.5mA / Alarm: 15.8mA
Operating Temperature	-20°C to +50°C
Relative Humidity	30°C: 0 - 90%
Pulse Count	1 - 8 Programmed in Learn Mode
Latching Modes	Any, First to Alarm, Sequential
Sensitivity Settings	Automatic from Learn Mode Impact
Indicator	Two colour LED
Dimensions	27(L) x 22(W) x 87(H)mm



	Cat.	Qty 1+
12V Intelligent Pulse	LA-5073	\$14.95

REED SWITCH MAGNET ASSEMBLIES

NC REED SWITCH*

Ideal for burglar alarms.

Specifications	SM-1002
Total length	44mm
Glass length	16mm
Contact rating	10W
Switching voltage	200VDC (max)
Switching current	0.5A (max)
Carrying current	1.0A (max)



*Normally open, but closed when near magnet (see note at bottom of page).

	Cat.	Qty 1+	Qty 10+	Qty 25+
Reed Switch	SM-1002	\$1.95	\$1.75	\$1.55

NC REED SWITCH & MAGNET

These are used to secure an alarm circuit on a door or window. Sold as a pair, one has a magnet inside, the other a reed switch. They have powerful magnets, with self adhesive or screw mount. Screw terminating. Size same as LA-5070. Contacts open when magnets are apart and closed when together.



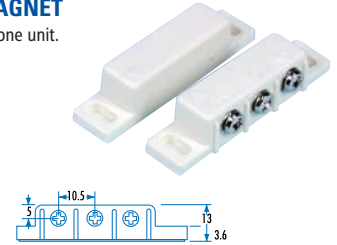
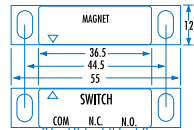
TECH TALK!

Normally CLOSED (NC) per pair.
Burglar Alarm Industry Standard

	Cat.	Qty 1+	Qty 4+	Qty 8+
Reed Switch	LA-5072	\$4.95	\$4.45	\$3.90

NO & NC REED SWITCH & MAGNET

You have both types of contacts on the one unit. Normally Open (NO) and Normally Closed (NC) per pair. Temperature: -40°C to 80°C



	Cat.	Qty 1+	Qty 4+	Qty 8+
Reed Switch	LA-5070	\$5.95	\$5.25	\$4.75

FLUSH MOUNT REED SWITCH & MAGNET SETS

Just drill a recess in your door or window and the magnet flush mounts to be "invisible". The reed switch segment is similarly mounted into the door frame or window frame & wired into your system. Available in two versions to suit timber or metal frames with both versions normally closed contact.

TAPERED VERSION TO SUIT TIMBER FRAMES

- Dimensions: 31(L) x 9(Dia)mm
- Surface Diameter: 19mm

Cat. LA-5075



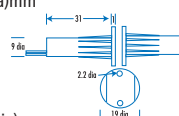
TECH TALK!

Normally CLOSED (NC) per pair.

TOOTHED VERSION TO SUIT METAL FRAMES

- Dimensions: 19(L) x 19(Dia)mm
- Surface Diameter: 24mm

Cat. LA-5076



	Cat.	Qty 1+	Qty 4+	Qty 8+
For Timber Frame	LA-5075	\$4.95	\$4.45	\$3.90
For Metal Frame	LA-5076	\$5.95	\$5.25	\$4.75

NC MINIATURE REED SWITCH & MAGNET

Absolutely tiny, these encapsulated reed/magnet switches with leads are ideal for home and car security. Their size should make them extremely easy to conceal so that potential thieves are less likely to disable them. Made from moulded plastic.

- White in colour. Supplied with 300mm lead
- Dimensions: 33(L) x 8(W) x 8.5(D)mm
- Width including mounting tab: 15mm
- Hole spacing: 18mm
- Wire lead length: 300mm



TECH TALK!

Normally CLOSED (NC) per pair.

	Cat.	Qty 1+	Qty 4+	Qty 8+
Mini Reed Switch	LA-5074	\$6.95	\$6.25	\$5.50

LET'S FIND EVERYTHING YOU NEED

PERSONAL MINI ALARM WITH LED TORCH

A personal alarm made from tough ABS construction with a 120dB siren to deter thieves and attackers. To activate simply pull the rip-cord to pull out the pin. Replace the pin to deactivate the alarm. Also includes a LED light. Great for travellers.

- 105-120dB
- Practical design
- Compact size
- Includes 3 x LR44 batteries
- Dimensions: 72(L) x 31(W) x 22(H)mm

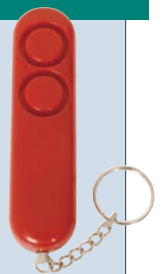


	Cat.	Qty 1+	Qty 4+	Qty 8+
Mini Personal Alarm	LA-5183	\$9.95	\$8.75	\$7.75

PERSONAL DUAL ALARM WITH LED TORCH

Compact design, easy to carry and ideal for use on bags or as a key ring, this personal dual siren alarm is the perfect solution to vulnerable or threatening situations. Deter thieves and attackers with its loud dual 130dB sirens and powerful independent torch function which will strobe when the alarm is activated. Simply pull the rip-cord to pull out the pin. Replace the pin to deactivate the alarm. Also includes a LED light. Fantastic for travellers.

- Traditional ripcord or key chain activation
- New technology super loud siren
- Includes 4 x LR44 batteries
- Dimensions: 105(L) x 28(W) x 15(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 8+
Personal Alarm	LA-5181	\$14.95	\$13.35	\$11.70

ALARM STROBES & SIRENS

BLUE 12V SIREN/STROBE

A combined siren and LED strobe for alarm systems. It has 120dB output with low power consumption.

- Output: 120dB
- Operating voltage: 12VDC
- Dimensions: 120(L) x 72(W) x 42(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5306	\$14.95	\$13.35	\$11.70

TECH TALK!

AIRCRAFT OWNERS/OPERATORS

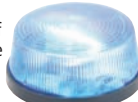
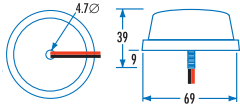
If you operate mobile equipment on the aircraft side of an airport you must fit an amber flashing light on such equipment.

Save yourself a fine & wire an amber unit to your vehicle. All units are 12V powered. Simply wire across ignition circuit so that strobe automatically comes on when vehicle is started.

MINI SIZE - XENON

These mini strobes are weatherproof and rustproof. They utilise a long-life xenon tube and are very bright for their size. Surface mount, single cable entry hole.

- Voltage: 12VDC
- Current drain: 180mA
- Strobe rate: 90 flashes / minute
- Size: 69(dia) x 30(H)mm

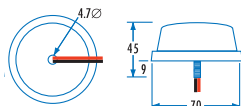


↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	Blue LA-5302	\$24.95	\$22.35	\$19.70
	Red LA-5303	\$24.95	\$22.35	\$19.70
	Amber LA-5304	\$24.95	\$22.35	\$19.70

MINI SIZE - LED

LED strobes for security, alarm or emergency use. Low current consumption units are fully sealed and waterproof; suitable for outdoor alarm applications. Mounts with 2 x 5mm bolts.

- 12VDC operation.
- Measures: 70(Dia) x 45(H)mm



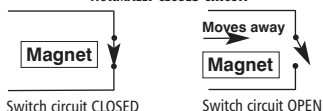
↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	Blue LA-5326	\$19.95	\$17.70	\$15.70
	Red LA-5327	\$19.95	\$17.70	\$15.70
	Amber LA-5328	\$19.95	\$17.70	\$15.70

TECH TALK!

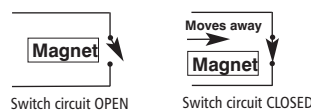
NORMALLY CLOSED.

This is when the switch contacts are touching in the presence of a switching magnet. The contacts OPEN when the magnet is removed. This is the most common system in alarm circuits.

NORMALLY CLOSED CIRCUIT



NORMALLY OPEN CIRCUIT



SMALL 'TWEETIE PIE' SIREN

This incredible little piezo screamer emits a 116dB wail. It sounds like a very loud canary. The sound at close range is almost unbearable! Ideal for any compact high noise alarm application



- Current 200mA max
- Measures 57(L) x 33(H) mm - less bracket
- Operating voltage: 12VDC

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5255	\$19.95	\$17.70	\$15.70

LARGE 'TWEETIE PIE' SIREN

This piezo screamer is the original Tweetie Pie's big brother. It is ideal if space is not too much of a problem, but it's still far smaller than all our other sirens. This screamer is louder than the smaller Tweetie Pie, it's 119dB and draws only 250mA.



- Colour is black.
- Measures 90(L) x 62(W) x 70(H)mm incl mounting bracket.
- Operating voltage: 12VDC.

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5254	\$24.95	\$22.35	\$19.70

PIEZO SIREN

Black in colour, supplied with mounting bracket and connecting cable.



- Height 100mm (from mounting bracket to top)
- Length 80mm, 80mm diameter.
- Operating voltage: 12VDC
- Resonant Freq: 3kHz
- Sound Output: 120dB
- Current Drain: 300mA.

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5258	\$24.95	\$22.35	\$19.70

INDOOR PIEZO SIREN

This unit is very popular for indoor use with house alarms. It is dustproof & waterproof.



- Voltage range: 7.5 to 15V
- Current (approx): 200mA @12V
- Output: 100-105dB @ 1m
- Measures: 85(Base) x 42(H)mm.

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5256	\$9.95	\$8.75	\$7.75

PLASTIC SIREN COVER

RUSTPROOF & UV STABILISED - Remains attractive in any environment. Will accept 5" siren, has 3 holes drilled for mounting strobe, and bracket for mounting a tamper switch, which is supplied.



- 5 year warranty for UV protection
- Measures approx 175 x 155mm at back 125 x 125mm at front
- Depth 145mm
- White in colour
- Includes tamper switch



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5112	\$24.95	\$22.35	\$19.70

5" HORN SPEAKER

Fully weatherproof. Unique voice coil construction ensures high dependability on full drive.



- Suitable for PA, intercom, security systems, etc.
- 10 watt - 8 ohm.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3180	\$16.95	\$14.95	\$13.35

5" X 8" HORN SPEAKER

This attractive unit in high impact white plastic features stainless steel hinge bolts. The special bracket enables maximum flexibility in mounting. Ideal for any outdoor application including marine.

- Rated at 30 watts power handling
- 8 ohm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3190	\$39.95	\$35.90	\$31.90

PIEZO 4 TONE SIREN WITH CONTROLLER

A very loud 125dB siren, it has four different tones - police, ambulance, fire engine or truck air horn.



Connects to a 12VDC power source and select a tone with the controller. Sturdy moulded plastic construction with metal mounting bracket.

- 125dB
- 12VDC
- Size: 150(L) x 130(Dia)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
	LA-5259	\$29.95	\$26.90	\$23.70

SECURITY LOCKS & LIGHTING

DOOR STRIKES

REMOTE CONTROL ELECTRONIC DEADBOLT LOCK

Keyless locking solution to integrate into a building or garage door. It has a compact structure that requires no additional remote device wiring. Designed to suit double swing doors with an 180° opening angle as well. You can configure time delay for opening and relocking doors. Ideal for new doors or as a replacement on an existing door lock on your home, and also for commercial doors such as storerooms and shop fronts.

Supplied with a keychain remote control and mounting hardware.

- Remote control up to 10 metre range
- Memory up to 40 transmitter IDs
- LED lights to indicate power and bolt status
- Fail safe. Automatically releases if power is interrupted

Specifications	LA-5086
Operating voltage	11-16VDC
Standby current	90-100mA
Working current	800-850mA
Dimensions	204(L) x 44(W) x 38(D)mm

Spare remote available: LA-5087

	Cat.	Qty 1+	Qty 4+	Qty 8+
Deadbolt Lock	LA-5086	\$139.00	\$124.95	\$110.95
Spare Remote	LA-5087	\$24.95	\$22.50	\$19.95



NEW 2015

1 YEAR WARRANTY

FAIL SECURE NARROW ELECTRIC DOOR STRIKE

Upgrade your conventional door locks to keyless entry electronic access. This new electric door strike is suitable for narrower doors. A fail secure door strike will keep a door locked shut in the event of a power failure. Conversely, fail safe door strikes keep doors unlocked in the event of a power failure. This electric door strike complements our range of RFID controls for card or fingerprint access, or can also be paired with one of our intercoms or video doorphones to create a convenient remote door access system.

- Suitable for wood, aluminium and hollow metal door jams
- Plate size: 160(L) x 25(W) x 28(H)mm
- Power: 12VDC, 450mA

	Cat.	Qty 1+	Qty 4+	Qty 8+
Fail Secure Type	LA-5077	\$34.95	\$31.45	\$27.90



1 YEAR WARRANTY

STANDARD DOOR STRIKE

Unlock your door with the push of a button - from the other side of the house or office! Designed for use with cylindrical lock-sets (commonly used on wooden and aluminium doors), it converts a conventional lock-set to an electronic access-controlled locking system. Benefits include higher security, and user convenience without needing to use a key.

- Size: 150(L) x 39.5 (W) x 28(H) mm
- Zinc alloy face plate

FAIL-SECURE TYPE

- 12VDC 450mA (on striking)

Cat LA-5078

See website for technical drawing

MORE INFO WEB

NEW LOW PRICE

FAIL-SAFE TYPE

- 12VDC 200mA (in locked state)

Cat LA-5081

	Cat.	Qty 1+	Qty 4+	Qty 8+
Fail Secure Type	LA-5078	\$49.95	\$44.90	\$39.90
Fail Safe Type	LA-5081	\$19.95		



1 YEAR WARRANTY

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here!
Check our website for over 3,500 pages of data!

MORE INFO WEB

SECURITY LIGHTING

SOLAR RECHARGEABLE SENSOR SPOTLIGHT

An all-in-one light, which turns on automatically at night when the built-in PIR detects movement. Set the light to illuminate for a short duration or continuously until manually turned off. During the day sunlight charges the solar panel on top of the light, so its ready for use after the sun goes down. Easy to install, and feature an adjustable head to shine the light where you need it most.

Specifications	
Lumens	250
Sensor	PIR
Motion detectable distance	5m
Battery type	1200mAh 4.5V Ni-MH battery included
Dimensions	210(L) x 210(W) x 140(D)mm



1 YEAR WARRANTY

NEW 2015

	Cat.	Qty 1+	Qty 5+	Qty 10+
Solar Rechargeable Spotlight	SL-3238	\$39.95	\$35.90	\$31.90

SENSOR SPOTLIGHTS

A simple method for adding a level of security in areas that may require costly or cumbersome cabling, or where no mains is available. When motion is detected, the light automatically turns on at a user selectable setting of 5 seconds, 20 seconds, or flashing for 20 seconds. Choose between battery powered or rechargeable models.

- Solar Light with PIR
- Tough ABS housing

SOLAR RECHARGEABLE SENSOR SPOTLIGHT

Choose this model if you have no requirement for the wireless announcer contained in SL-3236. Comes with the same solar panel and rechargeable sensor light with PIR and shares all the same functions.

Specifications	SL-3234
LED	Cree® XML
Lumens	500
Power	5x1.2V AAA battery pack included
Detection range	6-7m
Dimensions	240(H) x 110(W) x 150(D)mm



EMERGENCY LIGHT WITH PIR

An emergency lighting solution suitable for hallways, entry and exit points. The mains power supply charges the internal battery to ensure illumination is available during power outages. Also acts as a standard PIR spotlight to illuminate paths when motion is detected. Features the same selectable light settings and PIR.

Specifications	SL-3232
LED	Cree® XML
Lumens	500
Power	5 x 1.2V AAA battery pack included
Detection range	6-7m
Dimensions	240(H) x 110(W) x 150(D)mm

NEW LOW PRICE

1 YEAR WARRANTY

	Cat.	Qty 1+	Qty 5+	Qty 10+
Solar Rechargeable Sensor Spotlight	SL-3234	\$84.95	\$76.50	\$67.95
Emergency Light with PIR	SL-3232	\$29.95		



MOTION ACTIVATED TRACKING SPOTLIGHT

Mount the light to the eave or wall of your house facing the driveway, pathway, doorway, yard or other areas that you want illuminated at night. Once the front facing PIR sensor is activated the light will pan left or right, following the person's movement. Use it to track an intruder or to help illuminate your way from the car port to the back door for example. The 4 x 3W LEDs combine to produce a remarkable 500 lumens of light. LEDs and another PIR sensor are also built into the base to thwart any attempt to sneak past. Use the remote control to manually adjust the brightness and horizontal direction of the light. Supplied with mains plugpack, extension power lead, remote control and mounting hardware.



- Motion Detection Tracking via Adjustable Dual Front-Facing PIR Sensors:
Narrow: up to 150°, detection is spread across left, centre, right equally
Wide: up to 180°, detection priority is given to left and right
- Detection up to 13m away depending on vertical angle
- PIR sensor and LED built into base
- Built-in dummy camera with blinking LED

Specifications	SL-2705
LED type	4 x 3W Nichia brand LEDs
Combined Output	500 Lumens
Rotational range of light	240°
Dimension	215(L) x 77(Dia)mm (without bracket)

1 YEAR WARRANTY

	Cat.	Qty 1+	Qty 3+	Qty 6+
Motion Activated Spotlight	SL-2705	\$119.00	\$106.95	\$94.95

VIDEO DOORPHONES - WI-FI

WI-FI VIDEO DOORPHONE WITH SMARTPHONE APP

This Wi-Fi video doorphone connects to your wireless or wired network, and communicates with your Smartphone or Tablet, even if you are not at home. When the visitor pressed the door bell (or when motion is detected) you will be able to see who is at the front door on your phone. You can interact with the visitor via the built-in speaker and microphone, and trigger a remote door strike if installed (also available separately). You can also record video or take photo of the visitor at the touch of a button.

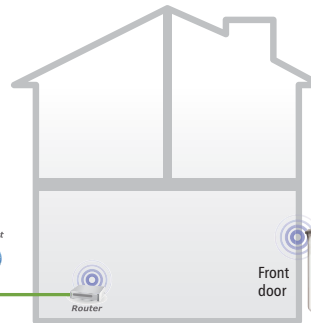
- Remote unlock (door strike available separately)
- Support iOS®/Android® device
- Support multiple users
- Dimensions: 190(H) x 100(W) x 70(D)mm



NEW
2015



View who is at the door on your Smartphone



	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Wi Fi Doorphone	QC-3695	\$199.00	\$178.95	\$158.95

VIDEO DOORPHONES - WIRELESS

3.5" LCD 2.4GHZ DIGITAL WIRELESS VIDEO DOORPHONE

Not your average video doorphone. This wireless solution utilises the newest digital 2.4GHz transmission technology; ensuring maximum transmitting distance (80m clear line of sight) with crystal clear picture quality. It also incorporates a PIR motion detection on the camera face and will record any visitor within range. It will also take a snap shot of your visitor pressing the doorbell ensuring that you have a record at all times. The 3.5" LCD receiver is very slim and elegantly designed. It has a rechargeable battery included which can dock on the desktop charging base supplied. The outdoor camera is supplied with a rain shield to protect it from the elements and is IP55 weatherproof rated. It has an integrated door lock control located on the rear of the camera for ease of wiring installation (locks available separately).

- Supplied with power supplies for LCD receiver and camera unit and mounting hardware.

2.4GHz Digital



Camera	QC-3400	3.5" LCD Monitor	QC-3402
Power Consumption	400mA	Power Consumption	400mA
IP Rating	IP55	Frame Rate	25fps
Resolution	300K pixels	Run Time	4 hours continuous
Viewing Angle	120 degrees	Input Voltage	5VDC @ 1A
Input Voltage	5VDC @ 1A	Dimensions	84(W) x 126(H) x 20(D)mm
Dimensions	74(W) x 134(H) x 31(D)mm		

	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Wireless Video Doorphone with 3.5" LCD	QC-3400	\$299.00	\$269.00	\$239.00
Additional 3.5" LCD Wireless Monitor	QC-3402	\$169.00	\$151.95	\$134.95

TECH TALK! - Wi-Fi

We are in an age of connectivity 24/7. The age of ever-present communications networks, Smartphones, Tablets, the Internet, email...

Did you know that the CSIRO's wireless invention lies at the heart of what is now the most popular way to connect computers without wires? It is used in offices, public buildings, homes and coffee shops - often called 'Wi Fi Hotspots'. The invention came out of CSIRO's pioneering work in radioastronomy. That work involved complex mathematics known as 'fast Fourier transforms' as well as detailed knowledge about radio waves and their behaviour in different environments. Indoor environments are particularly difficult for the rapid exchange of large amounts of data using radio waves. CSIRO solved these problems in a unique way at a time when many of the major communications companies around the world were trying, but with less success, to solve the same problem¹.

The CSIRO's world-leading Scientists have helped establish what today is an everyday, not really thought of convenience. In fact, if we there is no Wi Fi we are lost as to how to communicate.

In this catalogue we have added several new ranges of Wi Fi products. These include the Wi Fi Doorphone (above) and the Wi Fi Alarm Kit on page 453, both which, with the APP, allow you to view Visitors or alarms through your Smartphone. On page 383, there are Wi Fi Headphones and Wi Fi Audio Dongle/Receivers, on pages 389 Wi Fi In-wall/ceiling and on page 483 Desktop Speakers that allow you to stream different music simultaneously to different headphone or speaker locations throughout the house or office. The Arduino Wi Fi shield on page 14 allows you to design and build your own Wi Fi products.

All this possible because of this Australian invention by the CSIRO - Wi Fi!

¹ Extract from the CSIRO Website



LET'S FIND EVERYTHING YOU NEED!

FROM
\$129.00
XC-5230



AUDIO STREAMING SPEAKERS P483

FROM
\$149.00
AA-2132



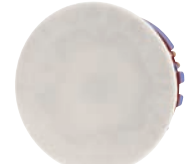
WI-FI HEADPHONES P383

FROM
\$79.95
AA-2110



WI-FI ADAPTOR/RECEIVER P383

FROM
\$349.00
CS-2468



WI-FI CEILING SPEAKER P389

VIDEO DOORPHONES - WIRED

VIDEO DOORPHONES - WIRELESS (CONTINUED)

WIRELESS 7" TOUCH SCREEN DOORPHONE WITH RECORDING

Wireless and convenient doorphone kit with a 7 inch colour screen, perfectly suited for homes, apartments, villas, hotels and offices etc where a wired unit can't be installed. The door unit has a call button, microphone and speaker, camera with infrared LEDs to illuminate who is at the door during night time, antenna, and can be powered using 6 x AA batteries or the supplied mains power adaptor. The answering unit has a 7 inch colour wide screen along with speaker and microphone, signal and power indicators, antenna, and mains power adaptor. There is also a microSD slot if you want to record who visits you when you're not home, and an AV output to playback on a TV. The system uses digital technology for a secure and interference free video and audio signal. There is also a provision to open a door that has a door strike fitted (sold separately).

Media storage

- microSD card available separately up to 32GB

KIT INCLUDES

- 1 x 7 inch colour LCD digital wireless answering unit
- 1 x Digital wireless door unit
- 1 x 12V 1A mains power adaptor for door unit
- 1 x 5V 1A mains power adaptor for answering unit
- 1 x DC power cable
- 1 x Unlock connection cable for a door strike
- 2 x Water resistant plugs
- 1 x Mounting bracket
- 1 x Mounting pack and hardware

Specifications	QC-3624
Doorphone	
Communication range	up to 100m
Camera resolution	640 x 480 (VGA)
Operating voltage	15VDC, 1.5A
Current consumption	180mA
Dimensions	145(L) x 85(W) x 36(D)mm
LCD Screen	
Screen resolution	640 x 480 (VGA)
Operating voltage	5VDC, 1A
Dimensions	221(L) x 143(W) x 35(D)mm

SD card capacity	Recording time
1GB	110 minutes
2GB	250 minutes
8GB	1070 minutes
16GB	2170 minutes



1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Wireless Doorphone with 7" Touchscreen Monitor	QC-3624	\$399.00	\$359.00	\$319.00

VIDEO DOORPHONES - WIRED

7" SLIMLINE VIDEO DOORPHONE

A stylish, elegant and simple to use doorphone that will not look out of place in your home or office. This 7" video doorphone kit is supplied with a slimline 7" monitor finished in white matt colour. It comes with an IP55 rated infrared camera that incorporates a rain shield to protect it from the elements. Operation is very simple, you are able to communicate with your guests with amazing clarity and be able to allow entry at a press of a button (door strike available separately). You are able to expand the system by adding an extra monitor (available separately).

- Brightness and colour adjustments
- Ring Tone Selection
- Doorbell volume control
- Infrared illumination for night time operation

Specifications	QC-3696
Power supply	12VDC
Resolution	420 TV lines
Monitor Dimensions	119(H) x 208(W) x 22(D)mm
Camera Dimensions	159(H) x 120(W) x 38(H)mm



1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Slimline Video Doorphone with 7" Monitor	QC-3696	\$199.00	\$178.95	\$158.95
Spare Monitor	QC-3699	\$149.00	\$133.95	\$118.95

2.5" LCD VIDEO DOORPHONE WITH RFID ACCESS

Enjoy the peace of mind a video doorphone can bring. This stylish and high quality unit consists of an outdoor camera with door bell/entry button as well as RFID access and a separate indoor 2.5" LCD for easily identifying visitors. With the indoor unit, you can remotely lock/unlock the door (door lock available separately), switch on video and answer calls. The outdoor camera uses 6 x white high brightness LEDs to illuminate visitors at night. Pressing the bell button on the outdoor camera will signal a bell warning on the indoor unit which can be answered like a regular telephone. You can then verbally communicate and see video footage of your guest.

RFID keys can be programmed for access so regular users of the system are granted entrance by simply placing their tag over the outdoor camera unit. 3 tags are included with the unit, a master, slave, and delete tag. Use the master tag to program new slave tags (standard RFID cards can be used), and use the delete tag to remove tags from the system.

A versatile device suitable for home use, or offices that require some form of access identification/authorisation for staff or frequent visitors.

- 2.5" Colour LCD
- Outdoor camera dimensions: 142(H) x 92(W) x 40(D)mm
- Monitor dimensions: 180(H) x 79(W) x 33(D)mm



1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 2 +	Qty 4 +
Video Doorphone with 2.5" LCD	QC-3622	\$249.00	\$225.00	\$198.95
Spare RFID Tag	QC-3623	\$9.95	\$8.75	\$7.75

VIDEO DOOR PEEPHOLES

VIDEO DOOR PEEPHOLE VIEWER WITH IMAGE CAPTURE

See who is on the other side of your door at the press of a button with this compact video peephole viewer. Using an adaptor to connect a camera to the peephole lens, it displays video from the other side of your door on a clear 3" LCD screen. Each time the power button is pressed the viewer can also capture a snapshot of the camera image to a MicroSD card (available separately). By allowing you to see through the peephole without pressing your face to the door it is ideal for people who can't reach the original view lens and provides substantially improved vision over traditional optical viewers. Suitable for replacing most existing peepholes it can also be easily installed on most doors using the adjustable length adaptor tube. Image capture can also be triggered by adding either the knock or PIR sensor modules (available separately).

- Power Requirements: 2 x AA batteries (not included)
- Peephole tube diameter: 12mm
- Peephole tube length: 33 to 45mm
- Viewer dimensions: 158(H) x 87(W) x 32(D)mm

NEW LOW PRICE



VIBRATION KNOCKING SENSOR TO SUIT VIDEO PEEPHOLE VIEWER

An add-on module to suit the QC-3735 video peephole viewer, the vibration sensor detects when there is a knock on the door and triggers the image capture in the viewer module. Fits neatly inside the expansion port of the viewer module and is powered by the main viewer batteries.

- Dimensions: 37(W) x 29(H) x 6(D)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Viewer with Image Capture	QC-3735	\$129.00		
Vibration Knocking Sensor	QC-3737	\$44.95	\$40.45	\$35.90

INTERCOMS

2 STATION WIRED INTERCOM

Either station can signal the other even when the system is off. It can be used as a room/baby monitoring system.

- Solid state circuit
- Adjustable volume
- Call facility even when unit is off
- Hands-free communication on sub-station
- Requires on 9V battery or 240V plugpack use MP-3146
- Supplied with 20m of connecting cable and staples.
- Sold as a pair



Domestic use only. Warranty does not apply if product is used industrially.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Station Wired Intercom	AM-4310	\$29.95	\$26.90	\$23.70

2 STATION WIRELESS FM INTERCOM

Plugs into a 240V power point and will send to another room, upstairs etc. Both units need to be on the same channel and on the same mains phase to communicate.

The intercom has a built-in monitor function so you can put one in a baby's room and listen from another location around the house. Additional units can be added to the system to provide a multi-point intercom system.

- Transmission through house wiring
- 2 Channels
- Sold as a pair
- Power points used must be on same phase, ideally the same circuit



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Station Wireless Intercom	AI-5500	\$74.95	\$67.50	\$59.95

DOORBELLS

WIRELESS DOORBELL

Install a doorbell without the mess of wires and drilling. This simple home wireless doorbell has 32 melodies to choose from and is completely wireless so all you need to do is secure the transmitter next to your door and place the receiver unit where it can be heard. It has an operating range of 50 metres in open air and is suitable for homes and office buildings.

- Easy to install at an affordable price.
- Requires 3 x AAA batteries



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Doorbell with 32 Melodies	LA-5018	\$17.95	\$15.95	\$14.35

WIRELESS DOORBELL - 240VAC PLUG

Simple plug and play in design. This compact sized doorbell receiver plugs into a power point and is not much bigger than a slim line power supply, so it fits on your powerboard or double wall socket without taking up too much space.

Plugs directly into any power point

Once plugged in, the battery powered wireless doorbell button can transmit up to 100 metres chiming out one of the 32 selectable melodies.

- Suitable for rental properties, apartments and small offices.



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
240VAC Plug-in Doorbell	LA-5029	\$24.95	\$22.35	\$19.70

WIRELESS MP3 DOORBELL

A wireless doorbell that plays your very own favourite MP3 song or message, or one of 16 pre-loaded polyphonic sounds. To load your MP3 file simply connect the main receiver unit to your PC and use the supplied software to trim, save and upload the file. The sleek elegant design won't compromise your room's decor either. Supplied with USB cables, CD with MP3 trim software and user manuals.

- Readable tune format: MP3 file
- Built-in sound: 24 polyphonic sounds
- Operating range: up to 100m
- 1 x 12V A23 battery for transmitter (included)
- 3 x 1.5V AA batteries for receiver (not included)



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
MP3 Player Doorbell	LA-5024	\$39.95	\$35.90	\$31.90

HIGH SOUND LEVEL WIRELESS DOORBELL WITH STROBE FOR THE HEARING IMPAIRED

When this doorbell rings, the sound is accompanied by several bright flashes from the receiver's built in strobe light, which makes it much easier for a hearing impaired person to know that someone is at the door.

The sounder can be taken from room to room, or even used outdoors and will work up to 30 metres from the transmitter button. The melody can be set to one of seven different sounds and has two volume levels - medium and loud. The unit is supplied with a neck lanyard and mounting hardware for the transmitter button.

- Requires 4 x C cells, available separately
- 210mm long

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Doorbell With Light Strobe	LA-5002	\$54.95	\$49.45	\$43.90

DOOR ENTRY BEAMS

ENTRY ANNOUNCERS

SOLAR WIRELESS PIR ANNOUNCERS

Monitor areas wirelessly with this Solar Wireless PIR motion detector. The PIR sensor reliably detects movement and transmits to the indoor announcer. It comes with a solar panel which mounts on the roof and connects to the sensor to ensure very long battery life. Great for installation in areas where it is not convenient to constantly replace batteries. Use as a driveway entry alert, garage or shed alarm or door entry and backyard announcer. Easy to install and mounting hardware is included. Also available without solar panel (LA-5172).

- Detection range 4-5m
- Control panel requires 4 x D batteries
- PIR detector requires 2 x AAA batteries
- Dimensions: Unit: 143(H) x 122(W) x 52(D)mm
- Wireless PIR: 120(H) x 75(W) x 60(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
Battery Powered	LA-5172	\$59.95	\$53.95	\$47.90
Battery & Solar Powered	LA-5174	\$29.95		
Doorbell to suit LA-5172/74	LA-5173	\$14.95	\$13.35	\$11.70

DOOR & DRIVEWAY BEAM

SOLAR POWERED WIRELESS IR ANNUNCIATOR KIT

With a wireless transmission range of up to 100m, this annunciator kit is a perfect, reliable solution for monitoring traffic in and out of driveways to shops, large commercial and rural properties. Attach the wireless IR detector at the entrance and be alerted of customers or guests as they enter and leave your premise. Installation is easy, the detector runs on 4 x AAA rechargeable batteries and is topped by the solar panel charger included. The wireless receiver can be wall mounted, placed over the counter, desk or wall mounted with no messy wiring connections in between.



Wireless IR detector	LA-5176
Includes	4 x AAA rechargeable batteries
Transmission Range	Up to 100m
Transmission frequency	433.92MHz
IR detection range	2 - 6m
Dimensions	71(L) x 64(W) x 43(D) mm
Annunciator	
Type	Microprocessor based control unit
Transmission frequency	433.92MHz
Requires	4 x 1.5V D size alkaline battery
Operating temperature	0°C - 40°C
Dimensions	143(L) x 110(W) x 50(D) mm
Solar Panel (without bracket)	
Dimensions	173(L) x 123(W) x 14(D)mm

	Cat.	Qty 1+	Qty 2+	Qty 4+
Door or Driveway Announcer	LA-5176	\$119.00	\$106.95	\$94.95

DOOR BEAMS

INDOOR COMMERCIAL GRADE DOORWAY BEAM



A compact entry warning system is designed for use in shops, restaurants, doctors and dentist surgeries etc. to alert you to the entry of customers and visitors. The system consists of a send/receive unit which transmits an IR beam across the doorway onto a prismatic reflector mounted on the opposite side. The beam is reflected back to the receiver to complete the circuit. When a person walks through the beam, the circuit is interrupted and this causes the alarm to sound an audible warning. The warning buzzer can be mounted in any suitable location.

- Mains plugpack and mounting hardware included.
- Range 2 - 6 metres
- Power: 9VDC
- Adjustable alarm time and volume
- Transmitter/Receiver size 70(H) x 60(W) x 30(D)mm
- Reflector size: 65 x 53mm



	Cat.	Qty 1+	Qty 4+	Qty 8+
Doorway Beam	LA-5193	\$79.95	\$71.95	\$63.95

COUNTER TO SUIT DOORWAY BEAM LA-5193

Attach to our LA-5193 Door Beam units to easily measure the door entry count in your shop, factory or office. The 20m lead carries both the signal and power, allowing you to mount the counter in a convenient location away from the door entry. This product is a must have for the serious retailer to easily measure the store traffic to sales conversions in their store.



- Counts up to 9999
- Includes '+' and 'Reset' buttons
- Measures: 60(W) x 70(H) x 23(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 8+
Counter	LA-5197	\$44.95	\$40.45	\$35.90

DOOR EXTENSION BUZZER TO SUIT LA-5193

This neat and compact buzzer can be mounted anywhere and is recommended as an addition to our Door Security Beam with Reflector (LA-5193) as an extension alarm. The volume of the buzzer is adjustable and the sound output can be selected by a slide switch to Alarm, Off or Chime. The sounding time can also be adjusted from 3 to 30 seconds.



- Supplied with mounting hardware and a 10m lead and an adjustment screwdriver.

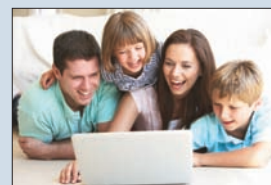
Specifications	LA-5188
Input voltage	9 - 15VDC
Consumption current	25mA Max
Ambient Temp	-20°C - 50°C (-4°F - 122°F)
Response time of buzzer	Chime: 1sec. Alarm: 30sec
Volume of Speaker	0 - Max (adjustable)
Alarm time	30 sec Max (adjustable)
Speaker output	Chime/Off/Alarm (selected by switch)



	Cat.	Qty 1+	Qty 4+	Qty 8+
Door Buzzer	LA-5188	\$34.95	\$31.45	\$27.90

BUY IT ON THE WEB...

Shop for all these Jaycar Electronics products online at our website - and check out our latest products and special offers!



DOOR BEAMS (CONTINUED)

WEATHERPROOF COMMERCIAL GRADE INFRARED BEAM

A heavy duty version of the common beam sensor used in doorway annunciators, this commercial grade infrared beam is ideal for detecting when a person or object crosses a boundary or entrance way. Simply install the sensor module aligned with the reflector and the relay output will be triggered by any object which breaks the beam. The sensor module projects a modulated beam which resists interference from sunlight and can be used over a range up to 15m. Suitable for connection to existing lighting or security systems, and also compatible with the extension buzzer and counter add-on units for our standard doorway beam. The polycarbonate casing is weatherproof with an anti-fog sensor window making it suitable for use outdoors and in dusty or damp environments. LED indicators are included to assist with installation and provide a visual indication of the beam status.

- Adjustable vertical beam angle
- Narrow beam angle
- NC tamper switch output
- 12VDC plugpack required
- Terminal block and cable gland included

Specifications	LA-5179
Input voltage	12 to 250V AC or DC
Sensing range	0.25 to 15m
Enclosure rating	IP66
Relay output	NO / NC contact
Output contact rating	30VDC 1A
Sensor module dimensions	122(H) x 62(D) x 61(W)mm
Reflector dimensions	82(Dia) x 8(H)mm

Optional Accessories:

Please note these require hard-wiring to achieve compatibility, see website PDF.

- LA-5188 Door Beam Extension Buzzer*
- LA-5197 Door Beam Counter Module*

*Note: Accessories need to be hard wired

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Infrared Beam	LA-5179	\$109.00	\$89.95	\$79.95
Extension Buzzer	LA-5188	\$34.95	\$31.45	\$27.90
Counter Module	LA-5197	\$44.95	\$40.45	\$35.90

DOOR EXIT SWITCH

NON-CONTACT INFRARED DOOR EXIT SWITCH

This infrared sensor can replace the old push button switch on automatic exit doors so that they will open with just a wave of your hand. The sensor will trigger an internal relay when your open hand comes within 100mm of the panel. No actual contact is required so there can be no transfer of contagions from one person to the next. The sensor is mounted on a stainless steel plate and has indicator LEDs built in to signal that the switch has been activated.

- 12VDC supply voltage
- 3A @ 30VDC contact rating
- 30mm sensor diameter
- 70 x 115mm plate dimensions

↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Door Exit Switch	LA-5187	\$64.95	\$58.50	\$51.95

RAINCHECK!

If your local Jaycar store has sold out of a currently advertised line we will be happy to issue you with a 'raincheck'.
Conditions apply - see page 528 for details.

ACCESS KEYPAD

SELF-CONTAINED SECURITY KEYPAD

This self-contained and economical keypad is designed for door-strike and security control applications. It has a single-relay output as well as a separate open collector transistor output intended for duress both with terminal blocks for easy connection. It has almost 100 million possible combinations for the user code(s) and the master code (4 - 8 digit code length), and a duress code for emergencies. The keypad employs an EEPROM memory so that the codes you have programmed will not be lost if the power fails. Presented in a tamperproof stainless-steel wall-plate and plastic backing box. It also features audible key beep and LED status indicators.

Specifications	LA-5355
Voltage requirements	12VDC
Relay output capacity	3A, 24VDC
Dimensions	117(W) x 74(D) x 48(H)mm
Will interface with most alarms	

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Keypad	LA-5355	\$39.95	\$35.90	\$31.90

RADIO FREQUENCY ID DEVICES (RFID)

WATERPROOF DIGITAL KEYPAD WITH RFID ACCESS CONTROL

A single door multifunction standalone access controller or a Wiegand output keypad/card reader suitable for an area requiring stricter access control such as a laboratory, warehouse, bank, or prison. The unit is suitable for mounting indoor or outdoor in harsh environments. It's housed in a sturdy IP65 vandal proof zinc alloy electroplated case that can be mounted to a wall with minimal drilling. Up to 2,000 users are supported in either a card, a 4-8 digit PIN, or a card + PIN option and the inbuilt card reader supports EM, 125kHz frequency cards. Red/Yellow/Green LEDs will indicate working status of the device. Protective features include anti-magnetic MOS output, output current lock, and short circuit protection. Full installation instructions and wiring diagrams featured in manual.

- Waterproof
- 2000 users
- Backlit keypad
- LED indicator (Green/Yellow/Red)
- Wiegand 26 input for the connection of an external reader
- Adjustable door output time, alarm time and door open time
- Built in light dependent resistor for anti-tampering
- Built in buzzer

Specifications	LA-5353
Voltage	12VDC
Keypad	12 keys, 3 x 4 digits
Card Type	EM 125kHz
Card Reading	Distance: 3-6cm
Active current	<60mA
Operating Temperature	-15-60 degrees Celsius
Adjustable Door Relay time	99 seconds
Adjustable Alarm Time	0-3 minutes
Wiegand Interface	Wiegand 26 bit
Wiring Connection	Electric Lock, Exit Button, DORL, External Alarm
Dimensions	128(H) x 82(W) x 28(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
RFID Keypad	LA-5353	\$129.00	\$115.95	\$102.95

EM400X RFID TAGS

KEY FOB

- Dimensions: 31(W) x 40(L) x 5(H)mm

Cat. ZR-8950

WAFER CARD

- It is around the same size as a standard credit card.

Cat. ZR-8952

LANYARD TYPE

- Hangs on a lanyard or belt clip. Similar size to a credit card.

Cat. ZR-8953

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Keyfob	ZR-8950	\$4.95	\$4.45	\$3.90
Wafer Card	ZR-8952	\$4.95	\$4.45	\$3.90
Lanyard Card	ZR-8953	\$4.95	\$4.45	\$3.90

REMOTE CONTROLS

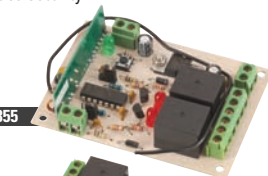
REMOTE CONTROL SWITCHES

MULTI CHANNEL REMOTE CONTROL RELAY BOARDS

Add remote control functions to a new project or existing installation with these handy remote control relay boards. Available with 2 or 4 channels, each output relay is controlled by a separate button on the key fob controller. Each channel can be set to momentary or latching mode allowing you to customise the setup to suit your application. Operating on the robust 433MHz band the key fob remotes work over distances up to 40m and feature rolling code transmitting for added security.

- Selectable momentary or latching mode for each channel
- Transmission frequency: 433MHz
- Transmission range: 40m max
- Operating Voltage: 12VDC
- Relay contact rating: 28VDC 10A max / 250VAC 5A max

LR-8855



2 CHANNEL REMOTE CONTROL RELAY BOARD

- Current draw: 50mA
- Board dimensions: 85(L) x 61(W) x 20(H)mm
- Remote dimensions: 51(L) x 34(W) x 13(D)mm

Cat. LR-8855

LR-8857



SPARE 2 CHANNEL KEY FOB CONTROLLER

Cat. LR-8856

4 CHANNEL REMOTE CONTROL RELAY BOARD

- Current draw: 80mA
- Board dimensions: 90(L) x 73(W) x 20(H)mm
- Remote dimensions: 63(L) x 40(W) x 13(D)mm

Cat. LR-8857

4 CHANNEL KEY FOB CONTROLLER

Cat. LR-8858

LR-8856

LR-8858



	Cat.	Qty 1+	Qty 2+	Qty 4+
2 Channel RC Relay Board	LR-8855	\$44.95	\$40.45	\$35.90
2 Channel Keyfob	LR-8856	\$14.95	\$13.35	\$11.70
4 Channel RC Relay Board	LR-8857	\$59.95	\$53.95	\$47.90
4 Channel Keyfob	LR-8858	\$19.95	\$17.70	\$15.70

WIRELESS 4 CHANNEL RELAY RECEIVER (12V NOMINAL SEPARATION)

This unit, which can be operated with the 2 x remotes (supplied), will control up to 4 x relays in Normally Closed or Normally Open configuration as either Momentary or Latched operation (the relays are built-in to the receiver). The relay contacts are rated at 5A at 14VDC. If higher voltage or higher power (or both) switching is needed, simply get these relays to operate a higher power relay. Strictly speaking for simple control applications, the LR-8824 is all you need.



Specifications	LR-8824
Power input	10 - 15VDC
Current draw	350mA max
Standby current	<10mA
Transmission distance	30m typical (300m+ max line of sight)
Transmission frequency	433.92MHz
Transmitter features	SAW locked, rolling-code, water-resistant.
Learning capacity	250 remotes per module.
Outputs	4 x NO/NC relay contacts individually selectable as momentary or latched
Relay contacts	5A max at 14VDC
Receiver size	68(H) x 60(W) x 25(D)mm, Antenna is 150mm long when deployed

ADDITIONAL WIRELESS RELAY TRANSMITTER UNIT

This sophisticated addition is capable of controlling the LR-8824 with up to 4 control voltage inputs. You could, for example, have an input on channel 1, which would be from say a micro-switch connected to a window or a gate in a shed or barn.

The LR-8819 will transmit a signal (100m minimum, up to 400m line-of-sight) to the LR-8824 to raise an alarm. It will also accept USB type voltage signals etc. It will accept positive or negative voltage commands (it will operate without the remote controls). The LR-8819 expands the operational flexibility of the LR-8824 system enormously and is essential for fixed system monitoring.

- Unit measures 68(H) x 60(W) x 25(D)mm
- Antenna is 150mm long when deployed.

Cat. LR-8819

SPARE REMOTE CONTROLLERS FOR LR-8824

These units will operate the wireless 4 channel relay receiver. They are not required if you use the fixed transmitter LR-8819.

Cat. LR-8829



	Cat.	Qty 1+	Qty 2+	Qty 4+
Wireless 4 Channel Relay Receiver	LR-8824	\$99.95	\$89.95	\$79.95
Additional Wireless Relay Transmitter	LR-8819	\$39.95	\$35.90	\$31.90
Spare Remote	LR-8829	\$24.95	\$22.35	\$19.70

ONE CHANNEL HAND CONTROLLER/TRANSMITTER

For over 15 years now, one brand of remote control has dominated the Australian & New Zealand markets for remote controls for garage doors, motorised gates, lighting, alarms etc. This unit, called the FMT-301, is a 27MHz crystal controlled NBFM (Narrow band frequency modulated) device. It is coded with a 12-way DIP switch. There are over a million in service in Australasia. They are very reliable but they do wear out, drown, go walkabout or simply get lost. We now stock the most popular single channel unit. This will save ordering one through the garage door people who charge a fortune for replacements. This is the latest version of the most common operating transmitter in use in Australia/New Zealand today. It operates (always has) on 27.145MHz & requires a 216-type 9V cell. An alkaline battery is recommended but is not included. The controller is custom coded via a DIP-switch which is accessible from the battery cover.

- Weight: 72g excluding battery
- Dimensions: 96(H) x 55(W) x 20(D)mm

Suits garage doors, motorised gates etc.



	Cat.	Qty 1+	Qty 4+	Qty 8+
Handheld Remote	LR-8827	\$64.95	\$58.50	\$51.95

SINGLE CHANNEL KEYFOB REMOTE

Multi-purpose remote control keyfob for garage doors, lights automatic gates etc. It operates in the 27MHz band on an FM signal. The built-in microcontroller uses the latest technology allowing for easy setup and installation while providing maximum security and reliability.

- Requires 6V battery
- Battery status LED
- Up to 200m range



	Cat.	Qty 1+	Qty 4+	Qty 8+
Keyfob Remote	LR-8847	\$54.95	\$49.45	\$43.90

BIOMETRIC SCANNER SAFE

BIOMETRIC FINGER SCAN SAFE

This advanced biometric safe provides a secure storage utilising biometric finger print scan for fast and simple access in just 2 seconds! It features a foam interior with an elastic retention strap for holding your goods securely in place. Integrates a in-built flash memory which retains entered fingerprint data even during a battery failure. Ideal for storing money, passports, jewellery, personal documents and medications safely and securely. Supplied with 1m alloy security cable and even has the facility for bolting to a secure permanent fixture. Two security keys are also provided for back up.

- Weight: 1.5kg
- Low battery warning
- Mounting hardware included
- Requires 4 x AA Alkaline batteries
- Dimensions: 273(L) x 190(W) x 51(H)mm



Note: iPhone® not included



	Cat.	Qty 1+
Fingerscan Safe	HB-5457	\$69.95

DISCOUNT TRADE CARD

If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card which entitles you to substantial discounts on most Jaycar products.

Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.

*ABN will be required - see our website or Store Manager for further details.



WIRELESS TRACKERS

WIRELESS LUGGAGE TRACKER

Track the location of a luggage bag by attaching the switched on slave unit to the bag prior to check-in. After landing at your destination simply turn on the master unit, press the search button and let the tracker find the bag. Distance LEDs gradually light up and the beeper/vibrations become rapid as you get closer to the bag while the left/right LEDs indicate the direction of your bag.

The luggage tracker doubles as an anti-theft device for a wallet, purse etc. by sounding an alarm on both units when moved further than a set distance away from each other. Just place the credit card sized slave unit into a wallet or purse, set the desired distance to either six or fifteen metres, and keep the master unit in a different spot such as in a pocket.

- Range: up to 120m (line of sight)
- Alarm with vibration
- Built-in belt clip
- Pack contains: master unit, slave unit, battery cover, batteries, luggage tag, lanyard strap and user manual
- Battery life on standby:
Master: 50 days (8 hrs a day)
Slave: 60 days (8 hrs a day)
- Dimensions:
Master: 52.8(L) x 39(W) x 13.2(D)mm
Slave: 80(L) x 50(W) x 2.8(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Luggage Tracker	XC-0360	\$39.95	\$35.90	\$31.90

KEYRING LOCATOR WITH APP & BLUETOOTH® TECHNOLOGY FOR IPHONE®

An electronic leash that will sound an alarm when your iPhone® leaves your vicinity. You can also use your iPhone® to find the lost keyring thanks to the duplex communication protocol. A handy app is available which will show on Google Maps® the last time the keyring and phone were connected.

- The app can control the alarm threshold distance, set the keyring to start beeping when a call is incoming, and switch the proximity alarm on/off.
- A brilliant little device that could save you a lot of trouble.



Specifications	XC-0365
Bluetooth® protocol	4.0
Search range	20m
Batteries	Includes 1 x CR2032 button cell
Battery life	3-6 months
Dimensions	60(L) x 35(W) x 10(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Keyring Locator	XC-0365	\$34.95	\$31.45	\$27.90

MONTHLY SPECIALS

Look out for our monthly promotions in store now!

GPS TRACKING DEVICES

OBD II GSM / GPS TRACKING DEVICE

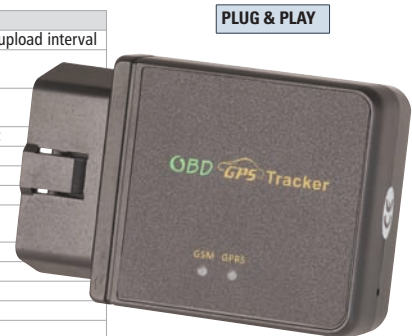
A multi-purpose GPS tracking device for auto enthusiast diagnostics, fleet management or vehicle security. This clever device connects and powers directly from the vehicle's OBD-II port and can SMS you DTC Trouble codes directly from your car's computer, assisting you to diagnose vehicle issues remotely or from the seat of your car. With the use of an activated SIM card (not included) data can be transmitted over the GSM network and viewed online using a web browser. View vehicle position on Google® Maps, speed, movement. Smartphones can also be alerted when the car drives outside a pre-set boundary, called geo-fence. There are no installation or on-going tracking charges. You only pay for the GSM SIM card and service. Up to 28 can be used simultaneously if you have a fleet of vehicles.

Note: Most post 1998 vehicles will feature an OBDII port

- OBD-II plug interface
- 3D G-force sensor
- Fuel consumption
- Over speed alarm & alert
- Driving behaviour
- Powered directly from OBD-II port



Specifications	LA-9014
Data Usage	0.07KB every 30 second upload interval
Normal operating temperature	-20 to +55°C
Restricted operating temperature	-35 to +70°C
GSM Frequency	850/900/1800/1900 MHz
GSM & GPS Antenna	Built-in
GPS Channels	32
Locate Accuracy	5 - 10m
GPS Start Time	1sec (Hot start), 36sec (Cold start)
Standby current	1 - 2mA
Tracking current	35mA
Operating voltage	12 - 32VDC
Charge voltage	5V
Battery	800mAh Li-ion
Dimensions	55(L) x 25(W) x 50(H)mm, weight: 80g



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
GSM / GPS Tracker	LA-9014	\$299.00	\$269.00	\$239.00

CHILD WATCH TRACKER WITH GSM & GPS

Keep a track of your child with this GSM and GPS tracking solution. Cleverly disguised as a working children's wristwatch, it has a built-in GPS module (requires a GSM Sim card) which gives you continuous positioning or location information in real time via SMS or the internet. Incorporates an SOS button during emergency as well as a microphone to listen to the sounds around the tracker when activated. The battery power is displayed on the watch LCD. Watch is recharged via the supplied Micro USB cable.

- In-built GPS module
- Web site tracking feature
- Low energy consumption
- Fast signal acquisition
- Supports continuous positioning by GPS and timed report by GPRS
- Supports alarm and remote monitoring
- Supports location information inquiry by SMS and website
- SOS button for emergency
- Microphone to listen to sounds around the tracker
- Two colours available - sold separately

Choose between pink or blue colours. We cannot guarantee colour supplied for online orders.

Specifications	LA-9022
GSM Frequency	850/900/1800/1900MHz
GPRS	Class 12, TCP/IP
GPS Location Accuracy	10m
LBS Location Accuracy	50-200m
Speed Accuracy	0.1m/second
Battery Capacity	3.7V, 450mAh
Voltage	4.2V
Average Standby Current	<10mA
Weight	15g
Dimensions	38(L) x 35(W) x 15(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Child Watch Tracker	LA-9022	\$109.00	\$89.95	\$79.95

WIRELESS CHILD TRACKER - 4 CHANNEL

This device can help keep a child safe by alerting the parent when they have wandered away by sounding an alarm on the receiver and transmitter. The transmitter is small and lightweight so it can be placed in the child's pocket, bag or by using the included lanyard. The receiver can be clipped onto a belt or handbag, features a vibration motor with mute option, and can support up to four transmitters (one supplied) so the parent can protect four children at the same time. Other features include panic button, and a search function with direction and distance indication so the parent can search for their child. The tags can also be attached to pets, mobile phones, and other valuables.

- Alarm: 96dB
- Alarm trigger distance:
Near: 10m (+/-5m) /
Middle: 20m (+/-10m) /
Far: 50m (+/-20m)
- Range: Up to 500m line-of-sight
- 2.4GHz digital RF technology
- Battery life at 8 hours per day / Transmitter:
Up to 60 days / Receiver: Up to 30 days
- Batteries and lanyard included
- Dimensions: Receiver: 95(L) x 65(W) x 18(D)mm /
Transmitter: 61(L) x 36(W) x 11(D)mm
- Additional Transmitter Tags available - use XC-0363



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Wireless Child Tracker	XC-0362	\$39.95		
Spare Transmitter Tag	XC-0363	\$24.95	\$22.35	\$19.70

PLUG & PLAY

WIRELESS TRACKING DEVICES

GPS TRACKING DEVICES (CONTINUED)

SOLAR RECHARGEABLE GSM/GPS TRACKER

Track bus/truck/taxi fleets, or use it for your own cars security or other covert purposes. This robust tracker features a GPS and GSM module for greater tracking flexibility. When GPS is not available (underground car parks etc) it will failover to GSM. There are several ways vehicle location and information can be viewed, these include through the www.responsegps.com website, calling the device, or SMSing the device a specific code. Variations of this SMS code will return either a Google® Map link with coordinates, or specific vehicle attributes such as speed, direction, latitude/longitude as well as battery life of the actual tracker. Low battery information will be sent via SMS to an authorized phone number.

The website tracking portal allows for a myriad of statistics to be viewed. On initial entry there is a large Google® Map display with icons of all your tracking devices. Drilling further into the settings will show geofencing entry and departure times, vehicle mileage, fuel consumption, overspeed, and more. Many of these statistics can be exported to an excel file for import into your local database.

Settings on the tracking device can be altered with specific SMS codes such as toggling shock mode (when vehicle moves, data begins uploading to server), geofencing alarm, timer mode (which specifies a time interval when data should be sent), and numerous other setting such as resetting the device.

- Real time upload to www.responsegps.com website
- Geofencing, mileage, overspeed
- iPhone® and Android® app available
- 5VDC
- Can be recharged with attached solar panel or cigarette light plug (included)
- Locate precision: 10-20m
- Uses 2G GSM network & uploads through GPRS (not compatible with CDMA or 3g WCDMA / CDMA2000)
- 4000mAh Li-ion battery
- Dimensions: 130(L) x 55(W) x 28(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
GSM / GPS Tracker with Solar Rechargeable Tracker	LA-9015	\$279.00	\$255.00	\$225.00

PERSONAL GSM / GPS TRACKING DEVICE - RECHARGEABLE

Locate and track the whereabouts of a person, personal belonging or vehicle in real time via your mobile phone. The tracker is rechargeable and compact so it can fit unobtrusively inside a pocket, handbag, luggage, vehicle, etc. To operate, simply insert a GSM Sim card (not included), charge and turn on. It then send its GPS coordinates via the GSM network to your mobile phone which can be viewed on GoogleMaps. Latitude, longitude, speed, direction, date & time, and battery condition or a GoogleMaps website link can be sent at any time by sending an SMS from your mobile phone to the tracker. You can also set it to SMS details once movement is detected, when the tracker is in a pre-determined area, over a preset speed, or when the battery is getting low.

A microphone and speaker in the tracker also allows you to dial in to listen to sounds around the tracker, and one of two phones can be called from the tracker for two way communication. To top of the rich list of features is a SOS button that sends help information to up to three pre-set phone numbers.

A USB cable and car charger is supplied to recharge the built-in rechargeable Li-ion battery, which will keep the tracker functioning for up to 3 days on standby.

- Listen to audio around tracker
- SIMCOM 340D GSM module (Quad band)
- 60 second auto tracking report mode option
- GPS interval power saving mode to extend battery life
- SMS locate
- Monitor function
- Calling function
- SOS function
- Over Area alert (Geo-fence)
- Over speed alert
- Low Battery alert

Specifications	LA-9013
Normal operating temperature	-20 to +55°C
Restricted operating temperature	-35 to +70°C
GSM Frequency	850/900/1800/1900 MHz
GSM & GPS Antenna	Built-in
GPS Channels	32
Locate Accuracy	10 ~ 20m
GPS Start Time	1sec (Hot start), 36sec (Cold start)
Standby current	<10mA
Tracking current	50mA
Charge voltage	5V, 300mA
Battery	950mAh Li-ion
Unit dimensions	61(L) x 42(W) x 11(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
GSM / GPS Rechargeable Tracker	LA-9013	\$159.00	\$142.95	\$126.95

TRACKING DEVICE FOR CARS, BOATS & TRUCKS

A GSM and GPS Tracking solution to locate and track the whereabouts of your vehicle in real time via the Internet on a computer or Smartphone. The device is easy to install with only 2 - 4 wires to connect. Insert a GSM Sim card (not included) and hide the device away on a metal surface or carpet using the included hook-and-loop adhesive. It works by sending the vehicle's GPS coordinates via the GSM network to the free online tracking service, which shows the location on Google Maps. It can also SMS longitude and latitude coordinates to up to 3 mobile phones, as well as alerts when vehicle exits a pre-determined area or exceeds pre-set speed.

Other features include an engine kill function to remotely disable the petrol pump, and movement sensor to extend battery life. An SOS/Panic button is also supplied which can send an SMS to the pre-programmed mobile phones. The built-in rechargeable Li-ion battery will keep the device functioning for up to 4 days when power is disconnected, which could help you locate the vehicle should it have been stolen and abandoned.

There is no installation or on-going tracking charges. You only pay for the GSM sim card and service. Supplied with wiring loom, installation and operation manual.

- Smartphone app available on iTunes® & Google app available
- Real time upload current location to website
- Turn off car engine by Internet platform or SMS for Anti-theft
- Listening sound around tracker with silence by SMS or platform.
- No platform Service charge (Our free tracking platform)
- SIMCOM GSM module (Quad band)
- Upload interval is 30 seconds
- Built in shock sensor to control GPS on off to extend battery life
- Shock sensor can be used as car shock & movement alarm
- Website shows history tracking
- Platform uses free Google Maps
- Send alert when vehicle exits a restricted area
- Send alert when vehicle exceeds the restricted speed
- Power supply disconnect alarm



Specifications	LA-9011
GSM Frequency	850/900/1800/1900 MHz
GSM & GPS Antenna	Built-in
GPS Channels	32
Locate Accuracy	5-10m
GPS Start Time	1sec (Hot start), 36sec (Cold start)
Standby current	1 - 2mA
Tracking current	35mA
Operating voltage	12 - 32VDC
Charge voltage	5V
Battery	800mAh Li-ion
Normal operating temperature	-20 to +55°C
Restricted operating temperature	-35 to +70°C
Unit dimensions	68(L) x 48(W) x 20(D)mm



Vehicle shown on tracking website

	Cat.	Qty 1+	Qty 2+	Qty 4+
GSM / GPS Tracker	LA-9011	\$159.00	\$142.95	\$126.95

LET'S POINT YOU TO THE RIGHT PAGE...

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UNINTERRUPTIBLE POWER SUPPLIES (UPS) - DC

UNIVERSAL DC UPS (UNINTERRUPTIBLE DC POWER SUPPLY*)

Compact DC UPS designed to replace your ordinary mains power adaptor. In the case of a power outage the internal battery will keep your equipment operating. Selectable 5V, 6V, 9V or 12V output to suit a range of devices such as a modem, network switch, router, video device, surveillance systems or lights. Outputs up to 3A, includes 7 interchangeable DC plugs, and features LED status indicators. The built-in rechargeable battery allows them to be used as portable DC power bank as well. The MP-5232 also has a USB output can supply power to Smartphones, Tablets etc.

Specifications	MP-5230	MP-5232
SLA Battery	6V/4.2Ah battery	12V/4.2Ah battery
Supply Voltage	230VAC±20%	230VAC±20%
Output Voltage	5, 6, 9, 12VDC	5, 6, 9, 12VDC
Current Rating	3A	3A
Power Outlets	1 x DC socket with 7 interchangeable plugs	1 x DC socket with 7 interchangeable plugs
USB Port	N/A	5VDC, 2.1A
Dimensions	135(L) x 100(W) x 115(H)mm	135(L) x 100(W) x 115(H)mm

*All other UPS products in this section provide automatic AC power backup.

Product may vary from the one shown

	Cat.	Qty 1+	Qty 5+	Qty 10+
3A	MP-5230	\$69.95	\$62.95	\$55.95
3A with USB	MP-5232	\$99.95	\$89.95	\$79.95

UNINTERRUPTIBLE POWER SUPPLIES (UPS) - AC

LINE INTERACTIVE UPS - 600VA

Keep your devices running when the grid goes down or give yourself enough time to power down safely. This self contained UPS is ideal for the home PC, point of sale machines, or workstations and peripherals. Features include intelligent CPU control, highly synchronous transfer (less than 6ms), automatic battery charging in UPS off mode, surge protection, voltage overload/low voltage protection and much more. There is a USB socket for connecting to your PC and software is provided to enable automated shut down, as well as RJ12 sockets for telephone protection.

Specifications	MP-5224
Rating	600VA 300W
SLA Battery	12V/7.0Ah battery
Supply Voltage / Output Voltage	100-240VAC / 100-240VAC
Backup time	Up to 5 mins
Switch over time	< 6ms
Noise	< 45db (at 1 metre)
Recharge time	90% capacity after 8 hours
Output waveform	Sine Wave (Mains), Modified Sine Wave (Battery)
Power outlets	3 UPS, 3 Mains (all surge protected)
USB Output / RJ12 input-Output	1 / 1
Software Compatibility	Windows 8.1, 8, 7, Vista, XP 2000, Linux
Dimensions	280(W) x 185(D) x 95(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
300W - 600VA	MP-5224	\$129.00	\$115.95	\$102.95

DISCOUNT TRADE CARD



If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.

*ABN will be required - see our website or Store Manager for further details.

UNINTERRUPTIBLE POWER SUPPLIES

UNINTERRUPTIBLE POWER SUPPLIES (UPS) - AC (CONTINUED)

UPS BACKUP TIME TEST RESULTS

Cat No.	Maximum Load		Internal SLA Battery	Backup Mode		Backup Time - Typical		
	VA	W		Output Waveform	Transfer Time (ms)	Small PC (65W-70W)	Medium PC and LCD Monitor (130W-140W)	Large PC plus LCD Monitor (190W-210W)
MP-5224	600	300	12V/7Ah	Modified Sine Wave	<10	31 mins	11 mins	4.5 mins
MP-5214	650	360	12V/7Ah	Modified Sine Wave	<10	25 mins	9 mins	5 mins
MP-5216	1500	750	12V/9Ah	Modified Sine Wave	<10	94 mins	49 mins	31 mins
MP-5205	390	650	12V/7Ah	Modified Sine Wave	<10	25 mins	9 mins	5 mins
MP-5207	1500	900	12V/9Ah	Modified Sine Wave	<10	94 mins	49 mins	31 mins
MP-5212	1000	700	12V/7Ah	Pure Sine Wave	Instant	95 mins	47 mins	32 mins

LINE INTERACTIVE UPS WITH USB - 650VA & 1500VA

Protect your valuable computer system and critical data from black-outs, brown-outs and power surges. Brown-outs and power failures can play havoc with sensitive computer systems and cause significant data corruption, or in a worst-case scenario, you could lose irreplaceable data. Once this uninterruptible power supply (UPS) is installed, it will constantly monitor the mains supply and switch to battery power and enable the system to be shut down without data loss. The included software can even be set up to save your data and close down your computer automatically if the power fails while you are away from your desk. The UPS is supplied with a USB interface cable and software. This UPS also features 2 x USB sockets on the front for charging any USB devices.

360W 650VA UPS

MP-5214

750W 1500VA UPS

MP-5216

Note: Must be powered from the mains or a pure sine wave source (inverter etc.)

Specifications	MP-5214	MP-5216
Rating	360W, 650VA	750W, 1500VA
SLA battery	1 x 12V 7Ah	2 x 12V 9Ah
USB output	5VDC, 2A combined	5VDC, 2A combined
Supply Voltage	230VAC ± 20%	230VAC ± 20%
Output Voltage	230VAC ± 10%	230VAC ± 10%
Backup time		
Small PC (65W - 70W)	25 mins	94mins
Medium PC & LCD monitor (130W - 140W)	9 mins	49mins
Large PC & LCD monitor (190W - 210W)	5 mins	31mins
Switch over time	< 10ms	< 10ms
Recharge time	8 hrs	8 hrs
Output waveform	Pure sine wave	Pure sine wave
Software	Windows 8.1, 8, 7, Vista, XP 2000, Linux	Windows 8.1, 8, 7, Vista, XP 2000, Linux
Compatibility		
Dimensions	320(L) x 145(W) x 95(H)mm	320(L) x 125(W) x 220(H)mm

MP-5214



NEW
2015

1
YEAR WARRANTY

	Cat.	Qty 1+	Qty 4+	Qty 10+
360W - 650VA	MP-5214	\$119.00	\$106.95	\$94.95
750W - 1500VA	MP-5216	\$299.00	\$269.00	\$239.00

LINE INTERACTIVE UPS WITH LCD - 650VA & 1500VA

Critical systems should ideally be connected to some form of backup power in the event of a blackout, power surge or brownout. A fault at the grid may drop the voltage at the mains, which could cause some systems to shutdown, reset, lose data or worse, resulting in thousands of dollars of damage (both material and immaterial).

These line interactive units give you a good balance between real time system protection and power redundancy when mains electricity is down or experiencing reliability issues. During mains voltage sags both units will deliver a steady voltage, keeping critical systems running properly. For a total power blackout the units can keep your systems running long enough to save important data or cleanly shutdown connected devices. Other important features include an auto shutdown when no load is detected, audible alarms for low battery, self diagnosis on boot, and intelligent battery management.

Both models feature an easy to read LCD which displays battery and load values as a percentage and input/output voltages. At the rear of the unit are 2 x RJ11 sockets for Telephone/Fax protection and a USB socket for connection to your PC for use with the power management software.

Specifications	MP-5205	MP-5207
Usage	Home PC, SOHO	Home PC, SOHO
Type	Line interactive	Line interactive
Status Display	LCD	LCD
Backup time full load Mins	10 - 20 minutes	10 - 20 minutes
Recharge time	90% Capacity after 8 Hours	90% Capacity after 8 Hours
Internal SLA battery	1 x 12V 7Ah	2 x 12V/8Ah
Input voltage	180 - 230VAC	180 - 230VAC
Short circuit protection	Yes	-
Mains connections	2 (input and output)	2 (input and output)
Communication	USB	USB
Frequency	50Hz	50Hz
Software	Windows 8.1, 8, 7, Vista, XP 2000, Linux	Windows 8.1, 8, 7, Vista, XP 2000, Linux
Compatibility		
Dimensions	340 (L) x 95(W) x 165(H)mm	325(L) x 125(W) x 220(H)mm



1
YEAR WARRANTY

	Cat.	Qty 1+	Qty 4+	Qty 10+
360W - 650VA	MP-5205	\$139.00	\$124.95	\$110.95
900W - 1500VA	MP-5207	\$319.00	\$285.00	\$255.00

ON-LINE RACK MOUNT UPS - 1000VA/700W

This is a true On-Line UPS. It has two power sources and a transfer switch that selects between them. The primary power source is the battery/inverter, and the mains or utility power is the secondary power source. Under normal operation the UPS is always running from the battery and the inverter, while the incoming mains supplies power to the battery charger. This design means that there is no transfer time in the event of a

power failure - if the mains goes out, the inverter (and its load) keeps chugging along and only the power to the battery charger is interrupted. The UPS has a rack height of 2U and can be either incorporated into a standard 19" rack set up, or used in a tower configuration. The front panel LCD displays charging and system status information.

Specifications	MP-5212
Rating	1000VA, 700W
SLA battery	3 x 12V 7Ah
Input supply voltage range	160 - 290VAC (for full load operation)
Output voltage	230VAC
Backup time at full load	See table above
Switch-over time	Instantaneous (true On-line UPS)
Recharge time	18 hours
Output waveform	Pure Sine wave
Case Dimensions	440(W) x 475(D) x 86.5(H)mm
Weight	14kg



NEW
LOW
PRICE

1
YEAR WARRANTY

	Cat.	Qty 1+	Qty 4+	Qty 10+
700W - 1000VA	MP-5212	\$449.00	\$405.00	\$359.00

MAINS LAPTOP POWER SUPPLIES

40W NETBOOK - AUTOMATIC CAT MP-3477

Specifications	MP-3477
Input voltage	110 - 240VAC
Power output	40W
Output voltages	12 - 24VDC
Output voltage selection	Automatic
Output current	3A
Plugs	7
Dimensions	172(L) x 69(W) x 40(H)mm



65W UNIVERSAL - SLIMLINE SUITS ULTRABOOK™ CAT MP-3321

Features USB output for charging USB devices.

Specifications	MP-3321
Input voltage	100 - 240VAC
Power output	65W
Output voltage	19VDC / 5VDC (USB)
Output current	3.15A / 1A (USB) Output
Plugs	7
Dimensions	113(L) x 56(W) x 15(H)mm



90W UNIVERSAL - MANUAL CAT MP-3476

Specifications	MP-3476
Input voltage	110 - 240VAC
Power output	90W
Output voltages	12 - 22VDC
Output voltage selection	Manual
Output current	6A
Plugs	9
Dimensions	150(L) x 58(W) x 37(H)mm



90W UNIVERSAL - AUTOMATIC CAT MP-3326

Features USB output for charging USB devices.

Specifications	MP-3326
Input voltage	100-240VAC
Power output	90W
Output voltages	15/16VDC @ 4.74A 19VDC @ 4.2A 5VDC @ 2.1A (USB Power)
Output voltage selection	Automatic
Plugs	11
Dimensions	126(L) x 55(W) x 31(H)mm



90W UNIVERSAL - SLIMLINE CAT MP-3332

Features a USB port so you can charge your Smartphone, Tablet and other USB powered gadgets without the need to carry a separate USB power supply.

Specifications	MP-3332
Input voltage	100 - 240VAC
Power output	90W
Output voltages	19VDC / 5VDC (USB)
Output current	4.4A / 2.1A (USB Output)
Plugs	11
Dimensions	110(L) x 70(W) x 16(H)mm



NEW 2015

120W UNIVERSAL - SLIMLINE CAT MP-3329

Specifications	MP-3329
Input voltage	100 - 240VAC
Power output	120W
Output voltages	19VDC / 5VDC (USB)
Output current	5.7A / 2.1A (USB Output)
Plugs	7
Dimensions	123(L) x 75(W) x 19(H)mm



144W UNIVERSAL - MANUAL CAT MP-3471

Features USB output for charging USB devices.

Specifications	MP-3471
Input voltage	100 - 240VAC
Power output	144W
Output voltages/current	15/16 @ 8.5A 18/19 @ 8.0A 20 @ 7.5A 22 @ 6.5A 24 @ 6.0A
Output voltage selection	USB 5V 1A Manual
Plugs	9
Dimensions	180(L) x 63(W) x 40(H)mm



↑	Wattage	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	40W	Auto	MP-3477	\$49.95	\$44.90	\$39.90
	65W	Fixed - Slim	MP-3321	\$54.95	\$49.45	\$43.90
	90W	Manual	MP-3476	\$69.95	\$62.95	\$55.95
	90W	Auto	MP-3326	\$79.95	\$71.95	\$63.95
	90W	Fixed - Slim	MP-3332	\$84.95	\$76.50	\$67.95
	120W	Fixed - Slim	MP-3329	\$99.95	\$89.95	\$79.95
	144W	Manual	MP-3471	\$119.00	\$106.95	\$94.95

MAINS LAPTOP POWER SUPPLIES

Buying an extra power supply saves the hassle of taking the power supply everywhere you take your laptop. Keep one at the office and one at home. The original power supply on your laptop may have failed, so get a replacement at a fraction of the cost of a genuine part. There's a model compatible with most laptops or netbooks on the market. See our website for compatibility charts.

- **Manual Type:** switch the output voltage to suit your laptop
- **Automatic Type:** models switch voltage automatically depending on the connector used

Some models display the voltage on a LED or LCD display.

- All models feature short circuit and overload protection
- 1 Year warranty on all laptop supplies



TECH TALK!

SELECTION GUIDE FOR LAPTOP POWER SUPPLIES

Looking at our large range of laptop power supplies, it might be a little overwhelming when trying to decide which is the best one to choose, but really it's quite simple. The easiest way to work out what you need it to look at the rating label on your original laptop power supply, and take note of the OUTPUT voltage and current (for example, 20V and 3.25A). Now multiply these together to get the POWER rating you need (in our example, 20 x 3.25 = 65 Watts). Then you just need to select a model that has an equal or higher power rating to your original power supply, in our given example this would be MP-3321 65W Universal Slimline Laptop Power Supply. Then it's just a matter of checking that the selected model is compatible with your brand of laptop, which can be done by looking on our website.

But if all this is too confusing – never fear, just bring your laptop and the old power supply into your nearest store and our friendly staff will assist.

IN-CAR LAPTOP POWER SUPPLIES

Keep your laptop or netbook charged on the road. Models to suit most of the mini computers on the market. Check our website for compatibility.

90W AUTOMATIC CAR LAPTOP ULTRA-SLIM POWER SUPPLY

High efficiency, slimline power supply with automatic output for smaller laptops. Simply connect to your car's cigarette lighter socket and select the plug that fits your computer. A clever small LCD built into the cable near the output plug shows you the voltage being delivered. The unit also features a USB port for charging or powering devices such as phones and Tablets.

Compatibility: Suits most models. See website for compatibility

Specifications	MP-3323
Input voltage	12VDC
Power output	90W
Output voltages	14-24VDC / 5VDC (USB)
Output current	6A / 2.4A (USB Output)
Output voltage selection	Automatic
Output current	6A max
Plugs	13
Dimensions	64(L) x 50(W) x 17(H)mm
Weight	72g



NEW 2015

↑	Wattage	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	90W	Automatic	MP-3323	\$74.95	\$67.50	\$59.95

150W - MANUAL CAT. MP-3472

Specifications	MP-3472
Input voltage	12VDC
Power output	150W
Output voltages	15, 16, 18, 19, 20, 22, 24VDC
Output voltage selection	Manual
Output current	6A
Plugs	9
Dimensions	115(L) x 60(W) x 35(H)mm



↑	Wattage	Type	Cat.	Qty 1+	Qty 4+	Qty 10+
	150W	Manual	MP-3472	\$74.95	\$67.50	\$59.95

POWER ACCESSORIES

2.1A USB PORT POWER BOOSTER

A small device that plugs into the USB port of your computer to provide a faster charge to a Smartphone or Tablet. Without this device, a standard computer USB port will only slow charge a Smartphone and in many cases not charge a Tablet at all. The intelligent circuitry within this booster detects the device connected and automatically switches to the full speed charging mode up to 2.1A.



- Compatible with all Smartphones and Tablets, including iPad®
- Supports Apple®, Samsung® and HTC®
- Input voltage: 5V
- Output current: 2.1A
- Dimensions: 45.5(L) x 18.5(W) x 11(H)mm **Product colour may vary from the one shown**

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5700	\$9.95	\$8.75	\$7.75

PLUG-IN SURGE PROTECTOR WITH 2 X USB CHARGING PORTS, 3.5A

Protecting your mains powered appliances from voltage spikes and surges is cheap insurance against ending up with an expensive paperweight. These surge protectors offer surge protection for the mains outlet(s), whilst also providing two USB charging ports capable of 3.5A total current and universal charging compatibility with all the major phones and tablets on the market. This universal compatibility circuitry allows the connected device to charge at the full rate, rather than at a much slower charge rate or not at all. Available in single or double adaptor type.

Energy absorption: 525J
Protection mode: A-N, N-E, E-A
Max surge current: 1800A
Clamping voltage: 710V
Response time: <1ns
EMI/RFI noise filter: 150KHz-100MHz
Max USB output current: 3.5A (shared on both ports)

Dimensions:
- MS-4085: 55(W) x 92(H) x 45(D)mm
- MS-4087: 91(W) x 72(H) x 55(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-4085	\$24.95	\$22.50	\$19.95
	MS-4087	\$29.95	\$26.95	\$23.70

6 WAY USB POWERBOARD

Charges up to 6 USB devices at a time and features a smart charging IC, which identifies the USB device connected and delivers the most suitable current for that device. It is compatible with numerous digital devices such as the most popular brands of MP3/MP4 players, portable gaming devices, digital cameras, Tablets, and Smartphones, including iPad®, iPhone®, and iPod® and Samsung®.

- Mains powered
- Power LED indicator

Specifications	MS-4068
Current Output	6.8A (Max)
	2 x 2.4A ports, 2 x 1A ports or 4 x 1.2A ports, 2 x 1A
Dimensions	190(L) x 40(W) x 32(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-4068	\$39.95	\$35.90	\$31.90

RACK MOUNT PDU & PATCH PANELS

6 WAY PDU WITH SURGE & OVERLOAD PROTECTION



Power up to six components in your rack setup. The board has 6 conventional 240V outlets and fits any standard 19" rack. It actually takes a little more than one rack unit, but mounts on 1U centres.

- 1U rack space
- Overload protected
- Surge Protection
- 10A output
- Lead length: 1.6m
- Dimensions: 482(W) x 46(H) x 46(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-4094	\$69.95	\$62.95	\$55.95

SURGE PROTECTED MAINS DOUBLE ADAPTOR WITH 2 X USB PORTS

Provides 2 x mains sockets and 2 x USB sockets for recharging all manner of Smartphones and USB powered gadgets. Features a green grounded LED and red protected LED. Surge protected so you don't fry your valuable gadgets in the case of any power spikes.

Specifications	PP-4037
USB socket output	5V at 1A
Voltage	230-240VAC
Max current	10A
Max Power	2400W
Max energy	525J
Max spike current	18000A
Noise filter	150kHz-100MHz
Output Voltage	5VDC
Out Current	1A
Output Power	5W
Dimensions	91(W) x 72(W) x 55(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PP-4037	\$15.95	\$14.35	\$12.70

DETACHABLE WALL PLATE DOUBLE ADAPTOR WITH 2 USB PORTS

A detachable wall plate adaptor that can be easily fixed to an existing power outlet without opening and rewiring which adds 2 x USB ports. The 2 x USB outlets can charge and power your USB devices up to 3.1A in total. Using these two USB ports, you can turn any wall outlet into a mobile device charging station. This smart unit is embedded with surge protection, switchable light sensor night light and emergency light. It suits to widely used wallplates such as Clipsal, HPM, etc. Perfect for the kitchen, bathroom, or garage.

- 2 x USB outlets
- 2 x Mains power outlets
- Emergency light in white light
- Light control night light in blue light

Specifications	MS-4009
Voltage	230-240V
Frequency	50/60Hz
Current	10A (Max.)
Power Rating	2400 Watt (max.)
Protection Mode	Fuse & MOV Protected
USB Outlets	5V, 3.1A (total)
Dimensions	134(L) x 95(W) x 38(D)mm (excluding pins)



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	MS-4009	\$39.95	\$35.90	\$31.90



Accessories not included

RACK MOUNT CAT5E/6 PATCH PANELS



Sleek attractive looking rack mount 24 port patch panel with a hard metal exterior. Numbered ports and a labelling area for each port. Also comes with instruction stickers on the back for easier cabling. See our tool section for punch-down tools.

- Takes up 1 rack unit
- 24 port
- Numbered ports
- Labelling area
- Cat.5/6
- Dimensions: 485(W) x 44(H) x 34(D)mm

⬆		Cat.	Qty 1 +	Qty 4 +	Qty 10 +
	24 Port Patch Panel	Cat5e YN-8046	\$49.95	\$44.90	\$39.90
	24 Port Patch Panel	Cat6 YN-8048	\$69.95	\$62.95	\$55.95

POWER BANKS

IPHONE® BATTERY BACKUP MODULE

This compact unit provides emergency power for your iPhone 5® and similar products. It is fitted with a Lightning™ connector for your phone and a USB plug for the module to be recharged itself. This product will give you, on average, another 8 hours of use (depending on application.)

- Stylish looking
- Compact 73(L) x 69(W) x 10(D)mm. That's small!



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MB-3605	\$26.95	\$23.95	\$21.35

5000MAH USB POWER BANK WITH IPOD® CHARGER



If your Smartphone or Tablet is always going flat or you rarely have opportunity to access your mains charger then this product can be a godsend. The backup battery can recharge your phone or Tablet so you remain connected and in contact with the world. We have two models available that include a sizeable 7000/5000mAh Li-ion battery and adaptors to charge most modern portable gadgets. All the cables and adaptors sit in small compartments or wrap around the charger for added convenience. The battery banks themselves can be recharged by connecting to a standard USB port.

- 5000mAh Li-ion battery
- USB Micro-B cable
- Included adaptor: USB Micro-B to 30-pin Apple Connector
- Dimensions: 113(L) x 58(W) x 15(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 20+
	5000mAh MB-3646	\$49.95	\$44.90	\$39.90

SOLAR MOBILE RECHARGEABLE POWER BANK

A smart and handy solar power bank exclusively designed to recharge your gadgets while you are away from a power source. With a built-in Lithium polymer battery and highly efficient solar panel, you can charge your mobile phones, digital camera, PDA's, MP3 player, iPhone® and iPad®. You can charge your device by exposing the solar power bank to direct sunlight or by connecting it to a USB power source.

- Built-in USB charge and output cables
- LED power indicator
- Foldable dual solar panel
- Rugged and strong design
- Anti-slip rubber paint finish



Specifications	MB-3722
Battery type	Lithium polymer
High efficiency solar panel	5.5V/280mA
Capacity	3.7V/4000mAh
Input	Micro USB: 5V/1A, USB cable: 5V/1A
Output	USB port: 5V/2.1A, Micro USB cable: 5V/1A
Self charging time	10 hours (by PC USB) 5 hours (by 5V/1A travel charger, not included)
Power display	15-17 hours (via solar panel, under full sunlight condition)
On/off button	4 LED indicators shows power level
Dimensions	press to start charging
Weight	124(L) x 71.5(W) x 16(D)mm
	120g

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	4,000 mAh MB-3722	\$64.95	\$58.50	\$51.95

RAINCHECK!

If your local Jaycar store has sold out of a currently advertised line we will be happy to issue you with a 'raincheck'.
Conditions apply - see page 528 for details.

SOLAR MOBILE RECHARGE POWER BANK

This foldable pocket size solar panel with a built-in lithium battery allows charging your gadgets whenever and wherever. You can either charge your device via exposing this product to sunlight or by connecting it to a power socket in your car or home. By using this product you can recharge a range of mobile phones, PDA's, MP3 players or digital cameras. Compact and convenient design featuring two USB sockets to charge USB compatible devices. An ideal companion for camping and/or travelling!



- Built-in USB charge and output cables
- LCD power display
- Foldable dual solar panel
- Rugged and strong design
- Anti-slip rubber paint finish



Specifications	MB-3720
Battery type	Lithium polymer
High efficiency solar panel	5.5V/620mA
Capacity	3.7V/6,000mAh
USB cable input	5V/1A
Output	USB port 1: 5V/2.1A USB port 2: 5V/1A Micro USB cable: 5V/1A
Self charging time	12 hours (by laptop) 7 hours (by 5V/1A travel charger) 10-12 hours (via solar panel, under full sunlight condition)
Power display	LCD
Dimensions	152(L) x 92(W) x 20(D)mm
Weight	295g



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	6000mAh MB-3720	\$119.00	\$106.95	\$94.95

PORTABLE RECHARGEABLE POWER BANK

Compact and portable charger designed to charge your Smartphones and Tablets on the go. It comes with built-in USB and micro USB cables to suit most devices, and two built-in USB ports to charge other Smartphones via their original charging cable. Charge the power bank using the built-in USB cable from your PC or using a power adaptor (available separately).



It has LED indicators to show you the battery status. Two different models to choose from.

Specifications	MB-3724	MB-3726
Battery type	Lithium polymer	Lithium polymer
Capacity	3.7V/5,000mAh	3.7V/10,200mAh
USB cable input	5V/1A	5V/1.3A
Output	USB port1: 5V/2.1A, USB port 2: 5V/1A	USB port1: 5V/2.4A, USB port 2: 5V/1A
Micro USB cable	5V/1A	-
Self charging time	12hrs (by laptop), 7hrs (by 5V/1A travel charger)	22hrs (by laptop), 10hrs (by 5V/2.1A travel charger)
Power display	5 LED indicators, each represent 20% of battery usage	4 LED indicators
Dimensions	108(L) x 64(W) x 16.5(D)mm	133(L) x 66(W) x 17.5(D)mm
Weight	140g	225g



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	5,000mAh MB-3724	\$49.95	\$44.90	\$39.90
	10,200mAh MB-3726	\$69.95	\$62.95	\$55.95

WATERPROOF 10,400MAH PORTABLE RECHARGEABLE POWER BANK

Boasting a huge 10,400mAh battery capacity this power bank will keep the dreaded battery low indicator on your Smartphone, Tablet or camera at bay. The double moulded housing is dust and waterproof, and features two USB ports; a 2.1A port to charge your power thirsty Tablet and a 1.0A port to charge your phone and other devices. The Battery Bank has a low self-discharge protection to prevent the internal batteries from dying out prematurely. A micro B USB lead is included when a recharge is required, indicated by the 4 blue LEDs on the top of the power bank.



- IP67 rated, waterproof dustproof also shockproof
- Energy-saving with auto-off function and low self-discharge
- Over-charge, over-discharge, over-current, short-circuit, and over-heat protection

Specifications	MB-3728
Battery type	Li-ion
Capacity	10,400mAh
Input	5V/2A
Dual Output	5V/3.1A combined
Charging time	5.5 hours
Compatibility	Smartphones, Tablets and devices powered by DC 5V input
Dimensions	145(L) x 75(W) x 25(D)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 20+
	10,400mAh MB-3728	\$99.95	\$89.95	\$79.95

MOBILE DEVICE CHARGERS

POWER BANKS (CONTINUED)

POWER BANKS WITH REMOVABLE 18650 LI-ION BATTERIES

These power banks are supplied with removable Samsung® 18650 Li-ion batteries, which provide high performance for their compact size, and can be easily swapped out for higher capacity cells over time. Choose between the sleek 1A 2500mAh model (MB-3717) which is able to charge your Smartphone on-the-go, and the high capacity 10,000mAh model (MB-3727) with 1A and 2.1A USB ports to charge Smartphones and Tablets. Charge the power bank using the supplied Micro B USB lead.

NEW
2015

- Compatible with all 18650 lithium-ion batteries
- Support hot plug-and-play
- LEDs to indicate charging, discharging and power status
- Li-Battery Protection IC
- MCU monitoring protection
- Recharging cut off voltage: 4.2V- 4.25V smart identification
- Discharging cut off voltage: 3V

2,500MAH POWER BANK WITH 18650 REMOVABLE LI-ION BATTERY

1A output to charge your Smartphone, iPhone®, iPod®, and other digital products.

- Supplied with 1 x 18650 lithium-ion battery
- Input: 5V/1A (Micro USB)
- Output: 5V/1A (USB)
- Dimensions: 99(L) x 24(Dia.)mm

10,000MAH POWER BANK WITH 4 X 18650 REMOVABLE LI-ION BATTERIES

Able to charge your Smartphone, iPhone®, iPad®, iPod®, Tablet, and other digital products.

- 4 x 18650 lithium-ion batteries
- Three LEDs to indicate the charging/capacity status
- Input: 5V/1A (Micro USB)
- Output: 5V/1A (USB), and 5V/2.1A(USB)
- Dimensions: 98(L) x 81(W) x 24(D)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 20+
2500mAh	MB-3717	\$24.95	\$22.50	\$19.95
10,000mAh	MB-3727	\$79.95	\$71.95	\$63.95

WIRELESS Qi CHARGING PADS FOR SAMSUNG

Adhesive pads for the Samsung® Galaxy S3 and S4 that allow these phones to be wirelessly charged with a Qi compatible charger. Expose the 3m adhesive tab and attach to the back of your battery, line up the terminals, put your case back on, and the induction coils inside the pad will make wireless charging possible. No more tangled charging leads required! Clean and convenient.

Suitable Qi Charger see MB-3658



Specifications	MB-3664	MB-3665	MB-3666
Input voltage	5VDC 1A	5VDC 1A	5VDC 1A
Charging current	5VDC 500-1000mA	5VDC 500-1000mA	5VDC 500-1000mA
Transmission distance	5mm	5mm	5mm
Dimensions	60(L) x 50(W) x 1.3(D)mm	83(L) x 42(W) x 1.3(D)mm	63(L) x 47(W) x 1.3(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Charging Pad for Samsung® S3	MB-3664	\$24.95	\$22.35	\$19.70
Charging Pad for Samsung® S4	MB-3665	\$24.95	\$22.35	\$19.70
Charging Pad for Samsung® S5	MB-3666	\$24.95	\$22.50	\$19.95

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

WIRELESS CHARGING PAD & CASES

BACK-UP BATTERY CASE TO SUIT IPHONE 5®

Eliminate the short battery life of the iPhone® 5 with this battery extender. Your iPhone 5® simply clips into this special battery case and will provide an extra 300 hours of standby time. It does not interfere with the iPhone® camera, headphone or charging sockets.

- Acts as a protective case
- You will hardly notice the extra thickness
- Battery capacity 2000mAh
- Colour: Black
- Charge time: 6 hours
- Additional talk time: 8 hours (approx)
- Standby time: 300 hours (approx)
- Dimensions: 135(L) x 60(W) x 15(D)mm

Note: iPhone® not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
2000mAh	MB-3695	\$39.95	\$35.90	\$31.90

Qi WIRELESS CHARGING CASES

Qi, pronounced as "Chee", is a new standard for inductive electrical power transfer over distances of up to 4cm. Because not all smartphones support this standard yet, we're stocking some compatible cases that will allow wireless charging on some of the most popular models.

A handy case that use magnetic induction between planar coils which will allow wireless charging of your iPhone® 5 on a compatible Qi charging pad (see MB-3658). The phone slides perfectly into the case and docks with the connector inside allowing power transfer. The case design won't interfere with the headphone socket or other side controls. Also doubles as a protective case.

Specifications	
Input voltage	5VDC 1A
Charging current	5VDC 500-1000mA
Transmission distance	4.5mm
Dimensions	80(L) x 56(W) x 1.3(D)mm



Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
1000mAh	MB-3662	\$39.95	\$35.90	\$31.90

Qi WIRELESS CHARGING PAD

A sleek Qi charging pad for wirelessly recharging devices that support this exciting new standard. Qi charging allows electrical transfer over distances up to 4mm so all you need to do is sit your phone or Qi compatible device on top and it will start charging. A convenient and intuitive method for keeping devices charged without needing to keep track of a multitude of specialty charging packs used for Smartphones, Tablets etc.

We have suitable Qi charging accessories for the iPhone 5®, Samsung Galaxy® S3 and S4 which will allow wireless charging on this pad.

Specifications	MB-3658
Input voltage	5VDC 2A
Output voltage	5VDC 1A
Charging rate	100-200kHz
Wireless range	4mm
Charging voltage	5VDC
Charging current	500mA- 700mA
Charging voltage	5VDC
Charging current	500mA - 1000mA
Energy efficiency	Greater than 72%
Dimensions	153(L) x 83(W) x 10(H)mm



Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
700mAh	MB-3658	\$49.95	\$44.90	\$39.90

LET'S FIND EVERYTHING YOU NEED!

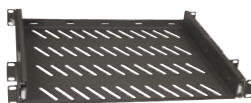
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RACK ENCLOSURES

P128

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BALL BEARING RACK SHELF

P128

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HB-5434



LEAD MANAGEMENT PANEL

P128

FROM
\$29.95
HB-5470



RACK ACCESSORIES

P128

WIRELESS CHARGING PADS & CASES (CONTINUED)

ADJUSTABLE SMARTPHONE CASE WITH BATTERY BACK-UP

Extend the battery life on your Smartphone so you can talk, message, browse the web, and play games for many more hours compared to just the phone's battery. Simply fit your Smartphone into the universal case and it will provide up to 180 hours of standby time. The case adjusts from 120 to 160mm to fit most sized phones. The case does not interfere with the camera or headphone output on most models.

NEW
2015

Two models available to suit either iPhone® or Smartphones with Micro B USB socket.

Common specifications:

- Built-in 3000mAh Li-polymer battery
- Slim design
- Charging time: 4 hours (based on 1A input)
- Standby time: 180 hours (approx)
- Dimensions: 135(L) x 59(W) x 18(D)mm



ADJUSTABLE BACK-UP BATTERY CASE TO SUIT IPHONE® WITH LIGHTNING™ PLUG - MB-3696

- Compatible with iPhone® 5, iPhone® 5S, iPhone® 6, iPhone® 6 Plus
- Licensed under the Apple® MFi program to ensure future iOS® or model releases

ADJUSTABLE BACK-UP BATTERY CASE TO SUIT SMARTPHONE WITH USB MICRO B PLUG - MB-3698

- Compatible with Samsung® Galaxy S Series* and Note Series, LG® G2/G3, Nokia®, and other Smartphone brands
- * Excluding Samsung® Galaxy S5 model

NOTE: MB-3698 does not suit Smartphones with reversed Micro B USB socket configuration or sockets not situated on the side.

Smartphone not included

NEW
2015

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Lightning™ Plug	MB-3696	\$59.95	\$53.95	\$47.90
USB Micro B Plug	MB-3698	\$59.95	\$53.95	\$47.90

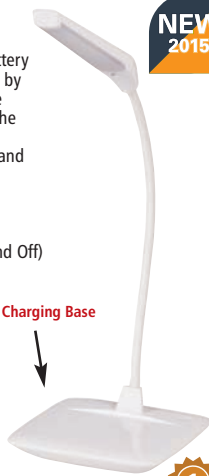
LED DESK LAMP WITH BUILT-IN Qi BATTERY CHARGER

Unlike ordinary lamps, this one features a built-in Qi battery charger, so you can charge your Qi enabled Smartphone by placing it on the base for a wireless charge. (Qi pads are available separately to convert popular Smartphones). The lamp features 36 cool white LEDs which can be dimmed depending on the application such as reading, relaxing and sleeping. A mains adaptor with 1.5m lead is supplied.

- Qi compatible wireless charging
- Adjustable neck and angle
- Five-step brightness control (100%, 60%, 30%, 5% and Off)

Specifications	SL-3144
Input voltage	12V/2A
Current consumption	600mA
Power consumption	6W (LED)
Wireless charging	5W (Qi v.1.1.2 supports low power transmitter)
Hi-power LED	36 pcs
Illumination	1100Lx (35cm distance)
Lumens	500
Colour temperature	5600-6000K
Expectancy	40,000hrs
Dimensions	350(H) x 150(L) x 130(W)mm

Qi Charging Base

NEW
2015

↑ Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+
500	SL-3144	\$129.00	\$115.95	\$102.95

MAINS CHARGER WITH TRAVEL ADAPTORS

MAINS TRAVEL ADAPTORS FOR USB, IPOD® & MP3 PLAYERS

Handy for charging USB devices without needing to connect the device to your computer. Switchmode adaptor with 5VDC output and 1A max current. USB cable not included as most users will already have this but we have a range of USB cables including a model to suit the iPod®. Suitable for iPhone® and latest generation iPod® products including the iPhone®4.

- The kit includes 4 interchangeable adaptors for Australia, US, UK and Europe power outlets.

Specifications	MP-3452
Input	100-240VAC 50/60Hz
Output voltage	5VDC
Output current	1A max.
Size	68(L) x 55(W) x 52(H)mm

NEW
LOW PRICE

↑ Approval No.	Cat.	Qty 1+
V090116	MP-3452	\$7.95

MAINS CHARGERS FOR SMARTPHONES & TABLETS

USB POWER ADAPTORS

A simple solution to your USB power needs in a conveniently small package. Choose between the 1.0A model to charge mobile phones, MP3 players, cameras and other small USB charged devices, or the 2.1A model that can also charge Tablets and iPads. They also feature worldwide voltage input making them great for travellers. Just connect your USB charging cable (not included) and away you go.



Specifications	Both
USB	Socket A
Input voltage	100-240VAC, 50/60Hz
Output	MP-3455: 1.0A MP-3449: 2.1A
Dimensions	40(dia) x 27(L)mm

FOR OUR RANGE OF
MAINS TRAVEL
ADAPTORS
SEE PAGE 475

NEW
2015

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
1A	MP-3455	\$14.95	\$13.35	\$11.70
2.1A	MP-3449	\$19.95	\$17.95	\$15.70

MAINS POWER ADAPTOR FOR IPAD®/IPHONE®/IPOD®

Mains power adaptor suitable for charging Apple® products including iPad®

- 30 pin connector
- Includes 1m USB charging/sync cable
- Input: 240VAC 50Hz
- Output: 5VDC, 2.1A

NEW
2015

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
2.1A	MP-3457	\$19.95	\$17.70	\$15.70

MAINS CHARGERS WITH USB OUTPUT FOR SMARTPHONES & TABLETS

A range of mains chargers with a USB output port to charge a variety of devices. Great as replacements or as a back-up. Each comes supplied with a 1m USB charge and sync lead to suit your specified device.

NEW
2015

MAINS USB CHARGER FOR IPHONE® WITH LIGHTNING™ CONNECTOR - 2.1A MP-3540

MAINS USB CHARGER FOR SAMSUNG® GALAXY TABLET - 2.1A MP-3542

MAINS USB CHARGER FOR SMARTPHONES WITH USB 2.0 MICRO B - 1.0A MP-3544

MAINS USB CHARGER FOR SMARTPHONES/TABLETS WITH USB 3.0 MICRO B - 2.1A MP-3546

NEW
2015

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
With Lightning™	MP-3540	\$24.95	\$22.35	\$19.70
With Samsung® Galaxy Tablet	MP-3542	\$19.95	\$17.70	\$15.70
USB 2.0 Micro B - 1.0A	MP-3544	\$17.95	\$15.95	\$14.35
USB 3.0 Micro B - 2.1A NEW	MP-3546	\$24.95	\$22.50	\$19.95

DUAL USB MAINS POWER ADAPTOR 2 X 2.1A

An ultra fast USB charger complete with 2 x USB sockets with 2.1A each, capable of charging virtually any mobile phone or USB device including all iPad®, iPhone® and iPod® models. Features worldwide voltage input making it great for travellers. Outputs 2100mA for each socket allowing it to charge 2 devices simultaneously. The perfect mobile device charging solution for your home and travel needs.

- Input voltage: 100-240VAC, 50/60Hz
- Output: 5VDC, 2.1A + 2.1A (4.2A total)
- Dimensions: 60(W) x 60(H) x 30(D)mm

NEW
2015

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
2 x 2.1A	MP-3459	\$24.95	\$22.35	\$19.70

MAINS CHARGERS FOR SMARTPHONES & TABLETS (CONTINUED)

4 OUTLET USB MAINS POWER ADAPTOR - 4.5A

Charges up to four Smartphones, Tablets and other USB powered devices simultaneously so all of your gadgets can be fully charged before leaving the home or office. The ports are split into two groups; group A can output 1x 2.4A or 2 x 1.2A, with a dedicated port with circuitry to charge a Samsung Tablet. Group B can output up to 1x 2.1A or 2 x 1.0A (suitable for Apple® products). Simply plug into the power point and use your own USB leads that suit the device.

Specifications	MP-3454
Input voltage	100 - 240VAC
Output	5VDC, Group A: 2.4A or 2 x 1.2A, Group B: 2.1A or 2 x 1.0A
Dimensions	85(H) x 55(W) x 44(D)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
4.5A	MP-3454	\$29.95	\$26.90	\$23.70

UNIVERSAL MOBILE PHONE CHARGER

Charges popular Smartphones, mobile phones and iPhone®/iPod® as well as some PDAs and MP3 players.

- Mains powered (100 - 240VAC)
- Output: 5VDC 1A regulated
- DC output USB port (female)

Plugs included:

- USB Mini Spin
- USB Micro B
- iPhone®/iPod® 30-pin
- Sony Ericsson
- LG
- Motorola
- Samsung
- Nokia 2mm
- Nokia 4mm



iPhone® not included



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
1.0A	MB-3656	\$29.95	\$26.90	\$23.70

CAR & MAINS MOBILE PHONE CHARGER PACK

The handy universal solution to charging your mobile phone in the car or home. Included is a cigarette lighter USB car charger and a mains USB charger each capable of delivering 5VDC up to 1A via a USB output. The pack also includes a universal USB charging lead with 4 interchangeable tips to match common mobile phones. You can also use either charger with any existing USB charging lead you may have.

Specifications	
Car Charger Input	12 - 24VDC
Mains Charger Input	100 - 240VAC
Output	5VDC, 1.0A

Plugs included:

- USB Mini Spin
- USB Micro B
- iPhone®/iPod®
- Nokia 2mm

Dimensions:

Car Charger: 100(L) x 36(W) x 31(H)mm

Mains Charger: 69(H) x 41(W) x 39(D)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
12-24V	MB-3655	\$29.95	\$26.90	\$23.70

2.4A WALL CHARGER WITH LIGHTNING™ LEAD FOR IPAD®, IPHONE®, IPOD®

Never have charging compatibility issues with your Apple® device with Lightning™ connector again. This 12W (2.4A) mains wall charger is licensed under the Apple® MFI program (made for iPad®, iPhone®, iPod®), so it is fully compatible with all Apple® devices with a Lightning™ connector, even taking into consideration any future iOS® updates and future model releases. The main charger has a single USB output socket, and is supplied with a 1m Lightning™ charge and sync lead which you can also use to sync your device to your home computer.

Specifications	
Input	110-240VAC, 50/60Hz
Output	5VDC 2.4A
Lead length	1m



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
2.4A	MP-3547	\$34.95	\$31.45	\$27.90

4-IN-1 MAGNETIC CHARGING HUB

An extremely convenient and attractive mains charger for your Smartphone or MP3 player. Comes with a variety of cables that magnetically connect to the charging hub to give more juice to your device.

- Sleek and compact, just sit it under your computer monitor and start charging!



Specifications	MB-3651
Includes	30 pin iPhone® connector, Mini USB, Micro-B USB and Nokia connector
Over current/voltage protection	
Output current	800mA
Output voltage	5V
Dimensions	80(Dia.) x 15(H)mm

Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
800mA	MB-3651	\$34.95	\$31.45	\$27.90

CAR CHARGERS FOR SMARTPHONES & TABLETS

USB CAR CIGARETTE LIGHTER ADAPTORS

Simply plugs into your car's cigarette lighter socket to provide a USB charging source for your USB devices as you drive. The built-in smart charging IC identifies the device connected so that the optimum charging current is supplied to the Smartphone, Tablet, GPS and other USB devices. Three models to choose from.

1A USB CAR CIGARETTE LIGHTER ADAPTOR - MP-3661

Suitable for most Smartphones, including iPod® and iPhone®.

2.1A DUAL USB CAR CIGARETTE LIGHTER ADAPTOR - MP-3663

2 x USB sockets with a total of 2.1A combined output power making it suitable for charging two mobile phones/iPods®/iPhone® or one iPad®/Tablet at the time.

4.8A DUAL USB CAR CIGARETTE LIGHTER ADAPTOR - MP-3667

2 x USB sockets with total 4.8A combined output power making it suitable for charging almost any power hungry USB devices including 2 x Tablets at the same time.



Specifications	MP-3661	MP-3663	MP-3667
Input	12-24VDC	12-24VDC	12-24VDC
Output	5VDC, 1A Max	5VDC, 2.1A combined	5VDC, 4.8A combined (2.4A + 2.4A)
Dimensions	42(L) x 29(D)mm	42(L) x 29(D)mm	42(L) x 32(D)mm



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
1A	MP-3661	\$6.95	\$6.25	\$5.50
2.1A	MP-3663	\$9.95	\$8.75	\$7.75
4.8A	MP-3667	\$15.95	\$14.35	\$12.70

IN-CAR QUICK CHARGER FOR IPHONE 5®, IPAD® ETC.

A handy in-car charger suitable for charging the latest Apple® brand gadgets such as iPhone 5® and iPad®, which have the new Lightning™ connector socket. With 2.1A of charge current available, this in-car charger is capable of charging your Apple® device at full speed, ensuring you get as much charge as possible on your commute.

- Input: 12-24VDC
- Output: 5VDC 2.1A
- Lead length: 900mm with Lightning™ connector

Compatible with

- iPhone 5®, iPhone 5s®
- iPad mini®, iPad® (4th generation)
- iPod Touch® (5th generation)
- iPod Nano® (7th generation)



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
12-24V	MB-3668	\$14.95	\$13.35	\$11.70

CAR CHARGERS FOR SMARTPHONES & TABLETS

IPHONE®/IPOD® CAR CHARGER/AUDIO KIT

Suited to in-car stereo systems with 3.5mm audio-in socket to play music from popular, portable audio devices. Listen to your favourite songs from your iPhone®/iPod® using the integrated audio cable (with a 3.5mm stereo adaptor) while charging it via the supplied cigarette lighter adaptor. Lead length is 1.2m and USB output is 1A.



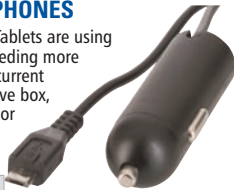
NEW LOW PRICE

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MB-3653	\$14.95	\$13.35	\$11.70

IN-CAR QUICK CHARGER FOR SMARTPHONES

More and more non-Apple brand Smartphones and Tablets are using the USB Micro-B socket for charging, and are also needing more current to charge at full speed. With 2.1A of charge current available, this in-car charger is your buddy in the glove box, ensuring you get a full charge into your Smartphone or Tablet on the drive to work. A saviour when you forget to charge overnight.

Specifications	MB-3669
Input	12-24VDC
Output	5VDC 2.1A
Lead length	900mm with USB Micro-B connector



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	MB-3669	\$14.95	\$13.35	\$11.70

CUP HOLDER POWER EXTENDER WITH DUAL USB SOCKETS

Plugs into a single cigarette power socket and provides two cigarette power sockets and two USB power sockets, while sitting neatly in your vehicle's cup holder. The input lead is a 1.6m long curly cord, keeping tangled messy cords to a minimum, and the top features LED voltage indicators to show battery condition. The twin USB output sockets are very handy as pretty much everything charges from a USB port these days, meaning you can keep the cigarette power sockets free for other car accessories like the GPS.

Specifications	PS-2120
Input voltage	12VDC
Output voltage	12VDC
Maximum current	10A (fused)
USB outputs	5VDC 1.0A + 0.5A (1.5A total)
Dimensions	76(Dia.) x 65(H)mm



↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2120	\$18.95	\$16.95	\$14.95

UNIVERSAL USB MOBILE PHONE CAR CHARGER

The handy universal solution to charging your mobile phone in the car. Included is a cigarette lighter USB car charger capable of delivering 5VDC up to 1A via the USB output, as well as a universal USB charging lead with 9 interchangeable tips to match all the most common mobile phones. You can also use it with any existing USB charging lead you may have.

Specifications	MP-3578
Input	12 - 24VDC
Output	5VDC, 1.0A

Plugs included:

- USB Mini 5pin
- iPhone®/iPod®
- LG
- Samsung
- Nokia 4mm
- USB Micro B
- Sony Ericsson
- Motorola
- Nokia 2mm



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3578	\$19.95	\$17.70	\$15.70

USB CAR CHARGER FOR IPAD®/IPHONE®/IPOD®

Charge your full arsenal of Apple devices while you're driving. Simply plug into the car's cigarette lighter outlet. Nothing new about that, but the difference with these is that the USB port(s) put out a huge 2.1A to fast charge an iPad®. Single outlet or double outlet models available. Please note that only one of the outlets on the double outputs 2.1A; the other is rated for 1A (to suit an iPhone®, etc.).



NEW LOW PRICE

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	Double Outlet Charger MB-3659	\$19.95	\$17.95	\$15.70

4.1A DUAL USB CAR CHARGER WITH MICRO USB LEAD

Charge up to 3 USB devices as you drive with this nifty charger. It features a 2.1A USB port, 1A USB port and a 1A micro-USB plug on a 500mm lead, which can be neatly stored away when not in use by wrapping it around the blue backlit head of the device.



NEW 2015

- Input: 12-24VDC

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3665	\$19.95	\$17.95	\$15.70

2.4A CAR CHARGER WITH LIGHTNING™ LEAD FOR IPHONE®, IPAD®, IPOD®

This compact 12W car charger has the power to charge the latest iPad® iPhone® and iPod® models with Lightning™ connector at the fastest charge rate. Not only does the charger have the power, but by being an official licensed "Mfi" (made for iPad®, iPhone®, iPod®) charger, you will never have issues with compatibility with your Apple® device now or into the future, even with iOS® updates and future model releases. The main cigarette charger has a single USB output, and the supplier Lightning™ charge and sync lead can be used to sync your Apple® device to your computer at home.



NEW 2015

- Input: 12VDC / Output: 5VDC 2.4A
- Lead length: 1m

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3660	\$29.95	\$26.90	\$23.70

CUP HOLDER POWER EXTENDER WITH PHONE CRADLE & DUAL USB SOCKETS

This clever charging system is designed to fit in a car cup holder to dock an iPhone® or iPod® in place preventing it from moving around while driving. It also neatly stores the charging cable away in the base to prevent clutter in the car's interior. Two cigarette lighter sockets are provided as well as a USB output for use with other electronic devices. Also has an LED indicator to state the level of your battery.



- 2 x 12VDC cigarette lighter sockets
- 2 x USB outputs
- iPhone®/iPod® holder
- Twist open bottom half
- Dimension: 100(H) x 70(Dia. base) x 92(Dia. top)mm

↑	Cat.	Qty 1+	Qty 10+	Qty 50+
	PS-2122	\$24.95	\$22.35	\$19.70

2 PORT USB CHARGER WITH 3.1A OUTPUT, 12/24VDC

Get rid of your messy cigarette lighter car chargers, and fit something more permanent and better looking. This 2 port USB charger has one port with 1.0A for charging a Smartphone, and the 2nd port can deliver 2.1A for fast charging your Tablet. Input power compatible with 12V and 24V battery systems, with connection via 6.3mm spade terminals.

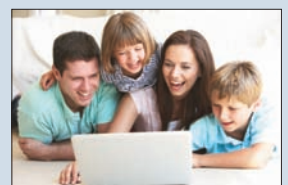


- Supplied with panel mount, under dash bracket, and a surface mount "hood"
- 2 port USB Charger: 36(Dia) x 50(D)mm
- Panel mount: 60(W) x 42(H)mm
- Under dash bracket: 58(W) x 51(H) x 15(D)mm
- Surface mount hood: 55(W) x 80(L) x 50(H)mm

↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	MP-3616	\$24.95	\$22.50	\$19.95

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Shop for all these Jaycar Electronics products online at our website - and check out our latest products and special offers!



USB DATA & SYNC LEADS

CAR CHARGER FOR GPS

UNIVERSAL GPS CHARGER WITH DUAL USB OUTPUT

This very handy universal GPS charger not only works as a replacement for an original GPS charger, but having two USB outputs and higher output power offers a bonus - allowing you to charge both your GPS and your mobile phone (or other USB device) at the same time! With 2.1A available from each USB port, it has enough power for even the latest and greatest big screen GPS models, whilst still having enough power left over to charge a second USB device. Supplied with 1.2m USB charging lead and 6 replaceable connectors to suit most GPS models.

- Suitable for: TomTom, TomTom XL, Navman, Garmin, Magellan, Navigon, Falk, Mio, etc
- Input: 12-24VDC
- Output: 5VDC, 2.1A max per USB port (4.2A total)
- Dimensions: 100(L) x 42(W) x 25(H)mm



↑	Length	Cat.	Qty 1+	Qty 5+	Qty 10+
	1.2m	MP-3676	\$29.95	\$26.90	\$23.70

SMARTPHONE LEADS

3-IN-1 MFI USB LEAD

This 3 in 1 USB lead has MFi license for iPod®/iPhone®/iPad® and are made to offer 2.4A output power charging as well as synchronise data. A USB cable with a micro USB plug, a 20 pin and an 8 pin Lightning™ adaptor, this one cable will cater for all your Smartphone charging and syncing requirements.



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1m	WC-7748	\$29.95	\$26.95	\$23.70

SYNC/CHARGE LEAD FOR GALAXY TAB® - 1M

Sync/charge lead to suit Samsung Galaxy Tab.

- Length: 1m



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1m	WC-7680	\$9.95	\$8.75	\$7.75

USB CHARGE/SYNC LEAD FOR IPAD®/IPHONE®/IPOD®

Suitable for Apple® iPhone®, iPod® and iPad® with 30-pin Apple® connector.



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	150mm	WC-7689	\$4.95	\$4.45	\$3.90
	1m	WC-7693	\$7.95	\$6.95	\$6.25
	3m	WC-7688	\$9.95	\$8.75	\$7.75

USB CHARGE/SYNC LEAD FOR IPAD®/IPHONE®/IPOD®

Replacement cables for connecting iPods® with Apple's® 30 pin connector (iPod Clickwheel®, iPod Mini®, iPod Photo® etc) to a Mac®.



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1m	WC-7692	\$14.95	\$13.35	\$11.70

LIGHTNING™ ADAPTORS & LEADS

LIGHTNING™ PLUG TO 30 PIN APPLE® SOCKET ADAPTOR

A range of adaptors suitable for connecting the iPhone 5® and other Apple® devices using the new Lightning™ connector to peripherals that use the 30-pin Apple connector such as iPhone® docks, chargers, and more.

Note: This Adaptor is intended for charging and syncing only.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Adaptor	WC-7726	\$14.95	\$13.35	\$11.70
Lead	WC-7727	\$14.95	\$13.35	\$11.70

MICRO-B USB TO LIGHTNING™ PLUG ADAPTOR

Allows your iPhone 5® or other Apple® device with a Lightning™ connector to be charged or synced with your computer with a micro-b USB cable.

- Dimensions: 32(W) x 17(D) x 7(H)mm

Note: This Adaptor is intended for charging and syncing only.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Adaptor	WC-7729	\$14.95	\$13.35	\$11.70

USB CHARGE & SYNC LEAD TO SUIT LIGHTNING™ PLUG

Suitable for the New Generation of Apple® devices. A Lightning™ connector lead for charge or data sync with units such as iPhone 5® and iPad mini® to any USB port.



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1m	WC-7728	\$14.95	\$13.35	\$11.70

MFI USB CHARGE/SYNC/STREAM LEAD TO SUIT LIGHTNING™ PLUG

Charge, data sync and audio stream from an Apple® devices that use a Lightning™ connector.

- Made For iPhone®/iPod®/iPad®
- Length: 1m



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	1m	WC-7731	\$19.95	\$17.70	\$15.70

LIGHTNING™ PLUG TO USB ADAPTOR CABLE - 3M - MFI APPROVED

Charge or sync your Lightning™ socket equipped iPhone® 5, iPad®, or other Apple® device with this MFi approved Lightning™ plug to USB adaptor. MFi approval means you will get maximum compatibility and reliability as it is officially approved by Apple®.



↑	Length	Cat.	Qty 1+	Qty 3+	Qty 6+
	3m	WC-7733	\$29.95	\$26.90	\$23.70

LET'S FIND EVERYTHING YOU NEED!

FROM
\$6.95
MP-3661



CAR SMARTPHONE CHARGER P476

FROM
\$14.95
MP-3455



MAINS SMARTPHONE CHARGER P475

FROM
\$26.95
MB-3605



POWER BANKS P473

FROM
\$12.95
XC-4302



USB HUBS P485

AV LEADS FOR SMARTPHONES & MP3 PLAYERS

MICROPHONE FOR SMARTPHONES

Turns your Smartphone or Tablet into a powerful audio recorder. The microphone allows you to record up to 12dB louder compared to the device's built-in microphone, making it ideal for recording lectures, interviews, voice memos and so on. The device is compatible with almost all Apple®, Android® and Blackberry® devices. Simply plug this efficient metallic microphone into your mobile device and enjoy an easy real-time audio recording experience.

Specifications	
Type	9.9mm Black Electret diaphragm capsule condenser microphone
Polar Pattern	Cardioid
Sensitivity	-45dB +/- 2dB, 0dB=1V/Pa (1kHz @ 1Pa)
Frequency response	20Hz - 20kHz
Dimensions	70(L) x 12(Dia.)mm, 15g



NEW 2015

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-2050	\$34.95	\$31.45	\$27.90

3.5MM 4 POLE PLUG TO 2 X 3.5MM SOCKET LEAD

Allows you to connect a separate microphone and stereo headphones or earphones to a Smartphone instead of using a combined earphone with built-in mic.



NEW 2015

↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	300mm	WA-7020	\$6.95	\$6.25	\$5.50

GUITAR LINK FOR SMARTPHONES

An easy-to-use adaptor that allows you to connect your electric or bass guitar, synthesizer, keyboard or similar instruments to an iPhone®, iPad® or iPod®. The built-in preamplifier boosts the signal, making it suitable for recording on your iOS® device (using the freely available App), or for connecting to an amplifier using the aux-out, which also accepts headphones if you want to play without disturbing the neighbours.

The interface features 6.5mm (1/4") mono input and output jacks and a stereo 3.5mm (1/8") headphone/aux out jack. Using a freely available iOS® App you can record what you are playing to play back and share later.

- Requires 2 x AAA batteries
- Dimensions: 80(L) x 60(W) x 20(D)mm



NEW 2015

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-2052	\$39.95	\$35.90	\$31.90

INSTRUMENT & MICROPHONE LINK FOR SMARTPHONES

Converts your iPhone®, iPad®, iPod® into a portable recording studio. Just connect it via the 3.5mm jack plug in a microphone or guitar to get recording with your favourite music-making app.

The Link features phantom power to power condenser mics, and a headphone output to monitor from your iOS® device.

Supplied with two AA alkaline batteries.

- XLR mic input for recording with studio-quality microphones
- 1/8" (6.3mm) headphone output for monitoring app output
- Hi-Z guitar input for great-sound recording
- Phantom power for condenser microphones



NEW 2015

1 YEAR WARRANTY

Specifications	AM-2054
XLR and 3.5mm TRS inputs	
Input level	-42dBu - +2dBu
Maximum input level	+2dBu
Input impedance	2.4kΩ
Power requirements	2 AA batteries (when using the microphone input)
Operating time	up to 15 hours
Guitar Input	
Connector	1/4" (6.3mm) phone jack
Nominal input level	21dBV
Maximum input level	-10dBV
Input impedance	470kΩ
Connection plug in for iPhone®/iPad®/iPod® Touch	
Connector	3.5mm 4 pole plug, 150mm
Cable length	490mm
Dimensions	120(L) x 63(W) x 35(H)mm
Phones/line out connector	
1/8" (3.5mm) stereo mini jack	

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-2054	\$69.95	\$62.95	\$55.95

ANDROID MIRROR CABLE

ANDROID PC MIRROR USB CABLE

Mirror your Android device onto your Windows® PC. This clever device displays what you see on your Android device's screen directly on your Windows® computer screen. Use the mouse and keyboard to take control, access and transfer data, send emails, check Facebook, play games and screen your phone calls. If your computer network (eg. workplace) prevents you from browsing social media and checking personal emails, this cable allows you to still access them via your data-enabled Smartphone with it discretely hidden away so the boss doesn't see.



Laptop and Smartphone not included

- Magnifies the Android® device screen on a Windows® desktop
- Full keyboard and mouse functionality
- Data transfer functionality
- Notifications for incoming calls & text messages on PC
- Video display supported on Android® 4.0
- Compatible with Android® OS 2.3, 4.0 and up

Specifications	WC-7682
Interface	USB 2.0 Type-A to Micro-B connector
LED	Blue LED link indicator
Transfer rate	up to 480Mbps
Power charging	500mA from PC
System requirement	OS: Windows® 8/7/Vista®/XP® Android® OS: 2.3/4.0 and up
USB cable length	1.2m
Dimensions	59(L) x 19(W) x 10.5(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WC-7682	\$59.95	\$53.95	\$47.90

ANTENNA BOOSTERS FOR SMARTPHONE

ANTENNA BOOSTER WITH SMARTPHONE HOLDERS

Boost the reception of your iPhone® or Samsung® S5 Smartphone with one of these holders with internal booster. Just add a 3G/4G antenna (available separately) so you can make or receive calls in poor reception areas. Supplied with a desktop stand and a windshield suction mount so you can use at home or in the car.

Available in two models to suit either an iPhone® or Samsung® S5

- AR-3326 - Features
- Suits Samsung® S5
 - SMA Female pigtail RG174
 - Dimensions: 115(L) x 57(W) x 18(D)mm

- AR-3328 - Features
- Suits iPhone® 3/3S/4/4S/5/5S/6
 - Windshield suction mount & base stand
 - SMA Female pigtail RG174
 - Dimensions: 155(L) x 61(W) x 16(D)mm



↑	Suits	Cat.	Qty 1+	Qty 4+	Qty 10+
	Samsung® S5	AR-3326	\$59.95	\$53.95	\$47.90
	iPhone®	AR-3328	\$59.95	\$53.95	\$47.90

TOOL SET REPAIR KIT FOR IPHONE®

The tools you need to safely open up your iPhone® and put it back together again. Replace cracked screens, dead batteries, scratched back panels and more.

- Suits iPhone® 3G, 3GS, 4, 4s, 5.

Contents

- 3 x iPhone® mounting panels with screw hole marks (for iPhone® 4, iPhone® 4s, iPhone® 5)
- 1 x Scraping plastic film
- 1 x Special tool for capacitive screens
- 1 x 0.8 Pentalobe screwdriver (for iPhone® 4, iPhone® 4s, iPhone® 5)
- 1 x 1.2 Pentalobe screwdriver (for iPhone® 4)
- 1 x 1.2 Philips screwdriver (for iPhone® 3, and parts of iPhone® 4)
- 2 x Guitar pick opening tool
- 2 x Plastic prying tools



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Repair Kit	TD-2115	\$16.95	\$14.95	\$13.35

BRACKETS & MOUNTING FOR SMARTPHONES & TABLETS

12VDC CHARGER CRADLE FOR IPHONE® 3/4

Holds and charges your iPhone® as you drive. The holder plugs directly into the car cigarette lighter and has charging cradles to suit both iPhone® generations and a universal holder for other types of mobile phones. The iPhone® cradle doubles as a protector case whilst out and about and docks securely into the holder bracket when you get back in the car.

- Power: 12VDC
- Includes a case/cradle for both iPhone® 3 & 4

Note: iPhone® not included

NEW
LOW
PRICE



↑	Cat.	Qty 1+
Charging Cradle	HS-9012	\$9.95

SUCTION MOUNT BRACKET FOR SMARTPHONES

Extremely strong suction mount joined to a tough flexible gooseneck. A wide variety of Smartphones will sit comfortably in the adjustable grip so you can access your phone while in your vehicle. The cradle can be rotated for portrait or landscape view.

- Dimensions: 235(L) x 84(W)mm

Note: iPhone® not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bracket	HS-9030	\$19.95	\$17.70	\$15.70

UNIVERSAL DASH & WINDSCREEN PHONE HOLDERS WITH STICKY GRIP

A quick, easy and secure way to hold your Smartphone as you drive. The special green silicon gel sticky material holds your phone in place so there's no need for custom phone bracket holders, working by sticking to the smooth surface of your Smartphone/device. It's so fast too, just press your phone onto the sticky pad, and that's it! The sticky pad doesn't leave any residue, and if it gets dirty it can be cleaned with water to return to an as-new state. Easy!

Two mounting options to choose from:

STICKY DASH / VENT MOUNT

Mounting is via a short dash mount suction bracket that has soft silicon gel, which can stick to almost any dash material, even textured vinyl. Also includes an air vent mount. HS-9050



HS-9050

WINDSCREEN MOUNT

Includes a suction cup bracket that attaches to your windscreen, with an adjustable gooseneck arm to move your phone into position. The sticky phone end can also be rotated for portrait or landscape view. HS-9052



HS-9052

Note: May not work with some phone covers. Requires a smooth, hard finish for the sticky to work

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Sticky Dash / Vent Mount	HS-9050	\$17.95	\$16.10	\$14.35
Windscreen Mount	HS-9052	\$17.95	\$16.10	\$14.35

TRANSMITTER/CHARGER/GOOSENECK IN-CAR HOLDER

A necessary accessory to have for your iPhone 5® and iPod 5® in your vehicle. The bracket holds the device in place and charges the device through the Lightning™ connector. It has a built in FM transmitter that allows you to stream your conversation and music to your car's sound system for Hi-Fi reproduction. The unit connects to 12V power via the cigarette lighter socket and has a rigid gooseneck/swivel bracket to hold at the desired position.

- Range: 5m
- Frequency: 88 - 107MHz

NEW
LOW
PRICE



Note: iPhone® not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Charging Cradle	AR-3125	\$34.95	\$31.45	\$27.90

UNIVERSAL TABLET HOLDER WITH HEAVY DUTY SUCTION MOUNT

Uses an extremely tough suction mount with a heavy duty adjustable gooseneck connected to a locking ball joint. The Tablet holder grip can be made wide or narrow by changing the grooves they're slid into. For a semi-permanent solution for Tablet access in a car, truck, or caravan this solution is ideal.

- Suitable for iPad®, Android® and surface Tablets
- Gooseneck 239(L) x 110(Dia.)mm
- Holder 185(H) x 165(L) x 135(W)mm



Note: iPad® not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	HS-9034	\$29.95	\$26.90	\$23.70

MAGNETIC WALL MOUNT FOR IPAD®

This wall mount bracket enables you to safely mount your iPad® in a prominent location where you can easily find it (or use it). It grips the iPad® by its corners and you hardly notice its presence. It will stick by its magnetic pad straight to a fridge or filing cabinet etc or any firm flat surface with its magnet adaptor pad (2 x screws/plugs supplied.)

You will love this simple product, hopefully before you stand or sit on your iPad®!

- Cruciform shape
- Landscape or Portrait format
- Silver metallic frame



Note: iPad® not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	HS-9013	\$24.95	\$22.35	\$19.70

TABLET HOLDER WITH HEAVY DUTY SUCTION MOUNT

Designed to be fixed in one position but can be easily adjusted if necessary, this holder will accommodate a variety of different sized Smartphones and Tablets for your car, truck, or van. The adjustable holder sits on a lockable ball joint for angular adjustments to get the perfect viewing angle. The holding vice (sides and bottom) can be slid out of their grooves and moved to a wide or narrow grip. Vertical height can be lowered or raised and the main arm can be locked at specific vertical angles. Features a suction mount for an extremely tight grip on a window or dash surface.

- Compatible with iPad®, Android®, surface Tablets
- Dimensions: 190(H) x 140(L) x 140(W)mm

Note: iPad® not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	HS-9036	\$34.95	\$31.45	\$27.90

CUSTOMERS PLEASE NOTE! TECHSTORE SPECIALS

SUPER BARGAINS ONLY AVAILABLE THROUGH TECHSTORE

MORE INFO
WEB

Many of you who see our regular ads have made personal visits for some products not available to shop customers. These products are usually in such short supply there is simply not enough to distribute to all stores. Indeed some items could be as few as half a dozen.

Such goods are sold through our "TECHSTORE".

When we advertise these products, we box them in a special section marked off with

'TECHSTORE ONLY - NOT AVAILABLE IN RETAIL STORES'.

Unfortunately many do not notice this and become angry when the product is not in their local store.

Please do not blame the local manager for this, he has no control, nor can he transfer stock from the TECHSTORE to his shop for you. If you wish to buy these items you must hurry and order direct to the TECHSTORE.

WATERPROOF CASE/HOLDERS FOR SMARTPHONES & TABLETS

SMARTPHONE WATERPROOF CASE WITH WINDSCREEN & BIKE MOUNT

Keep your phone secured and protected while mountain biking, boating or for other outdoor activities. It will accommodate an iPhone® or Samsung Galaxy S3® with the use of a specially designed adaptor. The front of the case uses a flexible transparent rubber covering while the rear also has a clear rear cover for your camera. A 3.5mm cable connects to the phone inside and provides a socket so you can connect headphones while the phone is in the case. IPX8 waterproof design so will protect the device inside when fully submersed down to a 1m depth. Includes: IPX8 case, suction glass mount bracket and handle bar mount bracket.

- 3.5mm internal cable to allow the use of headphones
- Compatible with: Samsung Galaxy S3®, iPhone 5®, 4G, 4Gs, 3G, 3Gs, 2G and the new iPod® Touch and mobile
- Dimensions: 170(L) x 86(W) x 22(H)mm

Note: iPhone® not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
IPX8	HS-9023	\$49.95	\$44.90	\$39.90

WATERPROOF CARRY CASE FOR IPAD® & TABLETS

iPads® are fantastic for accessing information anywhere but some scenarios may result in a dirt, dust, water or grease covering your screen. Chefs, mechanics, sailors, or builders who need to access data in the field on their iPad® don't want it covered in gunk so a form of protection is a necessity. With an IPX8 rating allowing full water submergibility and dust-proofing, this case is a must have. It's also great for recreational activities such as camping, kayaking, and boating.

- IPX8 waterproof rating
- Carry strap included
- Dimensions: 320(L) x 214(W) x 2(D)mm
- Fits tablets up to 243(L) x 190(W) x 13(D)mm



Note: iPad® not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
IPX8	HS-9022	\$26.95	\$23.95	\$21.35

WATERPROOF HARD TABLET CASES WITH SUCTION MOUNT

Keep your Tablet safely protected inside one of these hard cases. Will protect against water, dust, and sludge. The screen protector is a tough flexible highly translucent silicone compound that has the gasket moulded into it. 3 locking tabs will ensure everything stays secured inside without the risk of an accidental open. There is a 3.5mm stereo audio plug which converts to a socket on the outside for connection to your car stereo or other speaker system. A clear plastic covered opening on the back will allow photos to be taken with the tablets camera. Both models come with a suction glass mounting bracket. An optional pole mounting bracket can be purchased separately (HS-9031) for attaching your Tablet to a boat rail or other pole. Ideal for your next off-road or marine adventure.

7.7" HARD TABLET CASE - HS-9027

- IPX8
- Includes glass suction mount bracket
- Suitable for iPad mini, Google nexus and most other 7.7" tablets
- Dimensions: 230(L) x 153(W) x 22(D)mm



10.1" HARD TABLET CASE - HS-9029

- IPX8
- Includes glass suction mount bracket
- Compatible with iPad and most other 10.1" tablets
- Dimensions: 290(L) x 219(W) x 22(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
7.7"	HS-9027	\$79.00	\$70.95	\$62.95
10.1"	HS-9029	\$89.00	\$79.95	\$70.95

TRACKING DEVICES FOR iPhone®

PROTECTIVE CASE WITH WIRELESS ALERT KEYRING TO SUIT iPhone 4®

Never leave your iPhone® behind again. Hidden within the lightweight protective case is a wireless transmitter that pairs with the small receiver that clips onto your keys or a belt loop on your pants. When the iPhone® and receiver become 2m apart the receiver will beep to alert you that you have left your iPhone® behind, or that someone may be stealing it. The protective case has a soft touch finish and features a slim retractable bracket to hold the iPhone® in a portrait or landscape position on a table. A red LED on the case and receiver indicates an alarm condition or if the batteries need to be recharged. A USB charging cable is supplied to charge the case and keyring which operate for up to 58 hours on a full charge.

- Suits iPhone 4® & iPhone 4s®
- Alarm: 95dB
- Frequency: 2.4GHz
- Rolling code encryption
- Dimensions:
Case: 117(H) x 60(W) x 14(D)mm
Keyring alarm: 60(H) x 24(W) x 14(D)mm



Note: iPhone® and keys not included

↑	Cat.	Qty 1+
Keyring Alert	XC-0364	\$29.95

KEYRING LOCATOR WITH APP & BLUETOOTH® TECHNOLOGY FOR iPhone®

An electronic leash that will sound an alarm when your iPhone® leaves your vicinity. You can also use your iPhone® to find the lost keyring thanks to the duplex communication protocol. A handy app is available which will show on Google Maps® the last time the keyring and phone were connected. The app can control the alarm threshold distance, set the keyring to start beeping when a call is incoming, and switch the proximity alarm on/off. A brilliant little device that could save you a lot of trouble.

Specifications	XC-0365
Bluetooth® protocol	4.0
Search range	20m
Batteries	Includes 1 x CR2032 button cell
Battery life	3-6 months
Dimensions	60(L) x 35(W) x 10(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 8+
Keyring Locator	XC-0365	\$34.95	\$31.45	\$27.90

CHILD WATCH TRACKER WITH GSM & GPS

Keep a track of your child with this GSM and GPS tracking solution. Cleverly disguised as a working children's wristwatch, it has a built-in GPS module (requires a GSM Sim card) which gives you continuous positioning or location information in real time via SMS or the internet. Incorporates an SOS button during emergency as well as a microphone to listen to the sounds around the tracker when activated. The battery power is displayed on the watch LCD. Watch is recharged via the supplied Micro USB cable.

- In-built GPS module
- Web site tracking feature
- Low energy consumption
- Fast signal acquisition
- Supports continuous positioning by GPS and timed report by GPRS
- Supports alarm and remote monitoring
- Supports location information inquiry by SMS and website
- SOS button for emergency
- Microphone to listen to sounds around the tracker
- Two colours available - sold separately

NEW 2015

Choose between pink or blue colours. We cannot guarantee colour supplied for online orders.



Specifications	LA-9022
GSM Frequency	850/900/1800/1900MHz
GPRS	Class 12, TCP/IP
GPS Location Accuracy	10m
LBS Location Accuracy	50-200m
Speed Accuracy	0.1m/second
Battery Capacity	3.7V, 450mAh
Voltage	4.2V
Average Standby Current	<10mA
Weight	15g
Dimensions	38(L) x 35(W) x 15(H)mm



↑	Cat.	Qty 1+	Qty 2+	Qty 4+
Child Watch Tracker	LA-9022	\$109.00	\$89.95	\$79.95

PORTABLE WIRELESS SPEAKERS

SPEAKER DOCKS FOR IPOD®

PORTABLE STEREO SPEAKERS/CHARGER WITH DOCKING STATION FOR IPHONE®/IPOD®

Portable and versatile, these speakers are suitable for use in your bedroom, study or on the go. Dock your iPhone®/iPod® into the docking station to charge and enjoy high quality stereo sound from your device. It even has a 3.5mm audio jack for use with all your other favourite personal media devices. Completely portable, the docking cradle tucks neatly into place to avoid damage and will operate on 4xAAA batteries. An AC/DC adaptor has also been included.

- Apple licensed product
- Dual 2" full range drivers
- Total output power (RMS @ 10% THD): 4W
- Power per channel: 2W
- 3.5mm jack for use with personal media players than an iPhone®/iPod®
- Accepts 4 x AAA batteries for (does not charge iPhone®/iPod® in this mode)
- AC/DC adaptor for standalone charging
- Dimensions: 256(W) x 115(H) x 70(D)mm

iPhone® not included



NEW LOW PRICE

1 YEAR WARRANTY

↑	Cat.	Qty 1 +
Stereo	AR-1889	\$29.95

SPEAKERS

MINI MICROSD CARD SPEAKER

Take music wherever you go with this small rechargeable active speaker. It can play MP3 files off a MicroSD card or a USB Flash drive, it can also accept line inputs from devices such as iPod®, iPad®, laptops or any audio device with a 3.5mm line out. Other features include a built-in FM radio scan and a line out to act as a personal MP3 player to your earphones. Charges via USB.

- Output: 3+3WRMS
- Frequency response: 150Hz - 18kHz
- S/N ratio: 80dB
- Dimensions: 74(L) x 50(W) x 52(H)mm



Now includes USB port and FM Radio

NEW LOW PRICE

iPod® not included

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Speaker	XC-5176	\$24.95	\$22.35	\$19.70
↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Spare Li-ion Battery	XC-5195	\$6.95	\$6.25	\$5.50

RECHARGEABLE TRAVEL SPEAKER

Listen to your music in 3D stereo sound from your iPod®, iPhone®, iPad®, Smartphone®, MP3 player or computer, or play MP3 or WMA files directly from a USB flash stick or SD memory card. It also features an FM radio with 30 channel favourites, colour LCD screen, volume control, equaliser, calendar, alarm clock, headphone output and an adjustable auto power off. The Li-ion battery can be recharged via the USB port of a computer and a full charge provides about 8 hours of listening time. Supplied with 3.5mm audio cable, USB power cable, and Li-ion battery.

- Supports SD, SDHC cards up to 32GB (MMC/TF with adaptor)
- Equaliser modes: Normal, pop, classical, rock, gentle, jazz, bass
- Replay and Repeat modes
- Output: 2.5W x 2.5W
- Speakers: 2 x 1.5" with 40 x 70mm passive subwoofer
- Frequency response: 200Hz to 20kHz
- Sensitivity: 88dB
- Dimensions: 217(L) x 67(H) x 35(D)mm



1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 4 +	Qty 10 +
Speaker	XC-5175	\$49.95	\$44.90	\$39.90
↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Spare Li-ion Battery	XC-5195	\$6.95	\$6.25	\$5.50

NEAR AUDIO FIELD® SPEAKER

PORTABLE SPEAKER WITH NFC & BLUETOOTH® TECHNOLOGY

A portable speaker that allows you to carry your favourite music to anywhere you are. The near field communication (NFC®) feature allows you to effortlessly connect any NFC® enabled device to the speaker system wirelessly with a single touch. Without wires your music is streamed to the stereo speaker. At the same time using Bluetooth®, you can connect your Smartphone, Tablet or any Bluetooth® enabled computer.

The device is supplied with USB charge cable and 3.5mm stereo aux-in cable. It has its own volume control and wireless range up to 10m. The speaker allows you to answer a phone call by just a click on the button located on the top.

- Bluetooth® technology
- Microphone and hands free support
- Aux in, 3.5mm stereo socket
- Bass Diaphragm to reproduce ultra-low frequency sounds
- Built-in rechargeable battery

NEW 2015



Specifications	XC-5209
Output power	2 x 2WRMS
Range	10m
Frequency response	90Hz - 18kHz
Impedance	4 OHM
Charging time	3.5 hours
Playback time	max volume: approx. 5 hours, 80% volume: 6.5-7 hours
Dimensions	165(L) x 65(H) x 35(W)mm

1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Bluetooth®	XC-5209	\$39.95	\$35.90	\$31.90

NEAR FIELD AUDIO WIRELESS SPEAKER

Simply place your Smartphone on top of this speaker to wirelessly amplify the music playing from its loudspeaker, without the need for any configuration or connection whatsoever. This is made possible by using NearFA® (Near Field Audio) technology, which also uses far less power compared to its Bluetooth® and Wi-Fi counterparts. The speaker will last up to 10 - 15 hours using 3 x AA batteries (not included) and with no extra drain on your phones battery life when playing music. It can also be powered via USB and a 3.5mm audio-in socket is provided for use with other audio devices.



Suitable with iPod Touch® (4th generation), iPhone® 3/GS, iPhone® 4/4S, iPhone® 5, Samsung Galaxy SII/SIII and many more...

- Frequency response: 100Hz - 20kHz
- Output: 2W x 2 RMS, 1 x bass booster
- Requires: 3 x AA batteries (not included)
- 5VDC power in
- 3.5mm audio-in jack
- Dimensions: 155(L) x 71(W) x 38(H)mm



iPhone® not included

NEW LOW PRICE

1 YEAR WARRANTY

↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
NFA	XC-5220	\$29.95	\$26.90	\$23.70

TECH TALK!

LET'S EXPLAIN NEAR FIELD COMMUNICATION (NFC)

Near Field Communication (NFC), is a form of contactless communication between devices like Smartphones or Tablets. Its communication allows a user to wave the Smartphone over a NFC compatible device to send information without needing to touch the devices together or go through multiple steps setting up a connection. Fast and convenient, NFC technology is popular in parts of Europe and Asia, and is quickly spreading throughout the United States. Founded in 2004 by Sony, Nokia, and Philips, the forum enforces strict standards when designing NFC compatible devices. This ensures that NFC is secure and remains easy-to-use with different versions of the technology. Compatibility is the key to the growth of NFC as a popular payment and data communication method. It must be able to communicate with other wireless technologies and be able to interact with different types of NFC transmissions.

The technology behind NFC allows a device, known as a reader, interrogator, or active device, to create a radio frequency current that communicates with another NFC compatible device or a small NFC tag holding the information the reader wants. Passive devices, such as the NFC tag in smart posters, store information and communicate with the reader but do not actively read other devices. Peer-to-peer communication through two active devices is also a possibility with NFC. This allows both devices to send and receive information.

USES AT A TOUCH

- Contactless Payments
- Information Sharing
- Social Networking
- Transportation
- Health Care

TECHNOLOGY DIFFERENCES

Comparing Bluetooth® and Wi-Fi is similar to NFC on the surface. All three allow wireless communication and data exchange between digital devices like Smartphones. Yet NFC utilises electromagnetic fields while technologies such as Bluetooth® and Wi-Fi focus on radio transmissions instead. This makes the NFC & Bluetooth® go hand in hand, in that NFC negotiates the settings and passwords and Bluetooth® steams the signal to the audio devices, making connection quite seamless.

NFC OUTCOMES

The original intention of using NFC for payments has largely been unrealised. Its greatest application currently is enabling easy and seamless connection to audio devices like speakers headphone just to name a few.



SPEAKERS WITH BLUETOOTH® TECHNOLOGY

RECHARGEABLE WATERPROOF BLUETOOTH® SPEAKER



iPod® not included

A rugged, fully waterproof speaker for summer days at the beach, river, or when you're camping. Simply pair it with your Bluetooth® enabled Smartphone and you can play back music with ease. You can even have phone conversations through the speaker thanks to the in-built microphone. For those who are without Bluetooth®, there's a 3.5mm aux jack at the rear. Black shock resistant rubberised edges and handles make this a perfect companion for outdoor activities. Recharge with the supplied mains adaptor and USB cable.

- Fully waterproof shock resistant design
- Integrated full range stereo speakers
- Stainless steel speaker grill cover
- Built in rechargeable Lithium battery 7.4V 1800mAh 10 hour play or talk time
- 3W class D amplifier
- Built in mic with noise cancelling
- Hands free speakerphone
- Dimensions: 230(L) x 102(W) x 67(D)mm



IT FLOATS!

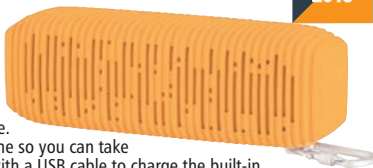


↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bluetooth® Rechargeable	XC-5208	\$149.00	\$133.95	\$118.95

RECHARGEABLE WATERPROOF SPEAKER WITH NFC & BLUETOOTH® TECHNOLOGY

Forget the cords and cables - connect your Smartphone or laptop to this rechargeable speaker wirelessly via Bluetooth® or NFC®. It has a stylish design and with its bass diaphragm produces amazing sound for its size. It also features a built-in microphone so you can take phone calls hands-free. Supplied with a USB cable to charge the built-in 1800mAh Li-ion battery that provides up to 5 hours listening time. A 3.5mm stereo audio cable is also included to connect other devices.

Supplied with a micro USB chargeable cable and a 3.5mm audio cable.



NEW 2015

Specifications	XC-5219
Output power	2 x 3WRMS
Frequency response	90Hz - 18kHz
Impedance	4ohm
Sensitive	80dB ± 2dB
S/N Ratio	> 65dB
Distortion	< 1%
Charge time	3.5 - 4.5 hours
Listening time	4 - 5 hours
Power supply	Built-in battery or micro USB 5V
Dimensions	186(L) x 62(H) x 56(D)mm



1 YEAR WARRANTY

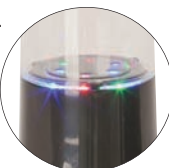
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
NFC & Bluetooth®	XC-5219	\$74.95	\$67.50	\$59.95

STEREO SPEAKERS WITH LED WATER MODULATOR & BLUETOOTH® TECHNOLOGY

Let there be light and sound! Mesmerise yourself with the spectacular light-filled fountains as they dance to the music. This set of stereo speakers produces quality sound and at the same time shoots multi-coloured streams of water in the clear tubes in accordance with volume and beats. The speakers have both Bluetooth® connectivity to stream from your portable devices and also 3.5mm audio jack to use with PCs.

- No batteries are required, simply plug into USB sockets for power.
- Dimensions: 265(H) x 90(W) x 90(D)mm

You need to see these in operation to appreciate how entertaining they are!



NEW 2015



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	XC-5222	\$99.95	\$89.95	\$79.95

WATERPROOF SHOWER SPEAKER WITH BLUETOOTH® TECHNOLOGY

This waterproof shower speaker brings your favourite music to your bathroom. Listen to music wirelessly from your Bluetooth® enabled Smartphone or laptop, and take calls wirelessly at the touch of a button. The device comes with a suction cap that allows you to stick it to any flat surface, and is powered by a built-in battery that can be charged with the supplied USB cable.



NEW 2015



1 YEAR WARRANTY

Specifications	XC-5630
Maximum Range	10m
Charging Time	3 hours
Operating Time	5 hours
Dimensions	93(L) x 85(H) x 45(D)mm
Weight	99g

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	XC-5630	\$34.95	\$31.45	\$27.90

SPEAKERS WITH WI-FI TECHNOLOGY

WI-FI AUDIO STREAMING SPEAKERS

These speakers connect to your Wi-Fi network and play music streamed across the network from your Wi-Fi enabled Tablet, PC or Smartphone using the freely available App. The 48kHz sampling rate and high quality DAC decoder chip ensures crisp sound quality. Easy to set-up, simply download the App and launch, and then connect to your Smartphone.

Choose between rechargeable or mains powered models.

NEW 2015



1 YEAR WARRANTY

Common features:

- Stereo speaker with built-in subwoofer
- Multi-room or individual speaker function
- Supports 802.11 b/g/n Wi-Fi standards
- Wi-Fi works in STA/AP mode
- Transmission distance: = 10m
- 3.5mm aux input for direct connection
- Supplied with mains power adaptor

PORTABLE 2.1 WI-FI AUDIO STREAMING SPEAKER - XC-5230

- Rechargeable and stylish design
- Volume control
- Output power: 2 x 3WRMS
- Built-in passive subwoofer
- Built-in 2000mA Lithium battery
- Micro USB charging port
- Charge time: 8 hours
- Run time: 4 hours
- Dimensions: 200(L) x 95(H) x 85(W)mm



WI-FI AUDIO STREAMING SPEAKER - XC-5232

- Larger cabinet for deeper bass notes
- Volume, play/pause, skip/reverse controls
- Output power: 2 x 3WRMS
- USB port to charge a Smartphone
- Dimensions: 256(L) x 160(W) x 95(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Wi-Fi	XC-5230	\$129.00	\$115.95	\$102.95
Wi-Fi	XC-5232	\$129.00	\$115.95	\$102.95



LOOK FOR OUR WI-FI WIRELESS HEADPHONES 383 IN OUR SIGHT SECTION

PILLOW SPEAKERS

PILLOW SPEAKERS

A safe and convenient alternative to headphones or earphones whilst listening to music in bed. Simply plug in an MP3 player, iPod® or radio and place into a pillow case. Perfect for children and adults alike. 1m lead with 3.5mm stereo plug included. No batteries required.

- 1m removable cable with 3.5mm plug



Specifications	
Impedance	16 ohm @ 1kHz
Rated power	0.1W
Maximum power	0.6W
Resonance frequency	500Hz ± 20%
Dimension	600mm Dia. Approx

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AS-3029	\$9.95	\$8.75	\$7.75

SMARTPHONE PRINTERS & WEB CAMERAS

MULTIMEDIA SPEAKERS

USB POWERED PC SPEAKERS

Portable USB-powered speakers for use with laptops, desktop PCs or mobile music players. Contemporary, space saving design with plug and play functionality. Separate volume control, power switch and headphone output, and as they're powered via your computer's USB, there's no need to use a plug pack or batteries.

Specifications	XC-5191
Power output	1.8WRMS
Frequency response	160Hz - 20kHz
Impedance	6Ω
Dimensions	154(H) x 75(W) x 36(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8WRMS	XC-5191	\$14.95	\$13.35	\$11.70

ACTIVE MULTIMEDIA SPEAKERS

Connect your PC, MP3 player, Smartphone or Tablet to these stylish 2 channel speakers. The attractive folded back design matches the surprisingly good audio quality. Mains powered and supplied with a 3.5mm stereo audio cable for almost universal connection to an array of devices.

Specifications	XC-5120
Output power	3W
Input jack	3.5mm
Input power	240VAC
Frequency	100Hz - 20kHz
Dimensions	170(H) x 90(D) x 70(W)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
3W	XC-5120	\$24.95	\$22.35	\$19.70

PC MICROPHONE

PC DESKTOP MICROPHONE

A high quality gooseneck microphone that is ideal for Skype chat, podcasting, video conferencing and music/voice recordings. It has a solid base to provide stability and a flexible neck angle to position it to the optimum position.

Specifications	AM-4089
Directivity	Omnidirectional
Impedance	<2.2k ohm
Sensitivity	-58dB±3dB
Mic plug	3.5mm
Cable length	2m
Dimensions	355(L) x 9.7(Dia)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AM-4089	\$12.95	\$11.35	\$10.35

SMARTPHONE PHOTO PRINTER

PHOTO PRINTER FOR ANDROID® DEVICES

This photo printing station is compact, simple to set-up and easy to use. Just plug in your mobile device and start printing! It runs on an all-in-one ribbon and photo paper cartridge and creates high-quality prints directly from your Smartphone, Tablet or digital camera via the Bolle Photo Plus app. The printer system will also charge the battery of your device so you won't deplete your charge while printing. Within the app you can make colour adjustments, print up to 10 copies at once, create panorama photo collages and even create greeting cards. Using your Smartphone you can create panorama photos, and the printing station will accommodate the long, landscape print in vivid colour. This system is the perfect choice for young kids and the not-so computer savvy, as it's simply plug-and-play with zero hassles.

- Only requires one single ink and paper cartridge for ease of use
- Charges devices while printing

Specifications	XC-5067
Printing Method	Dye Sublimation Thermal Transfer
Resolution	300dpi
Gradation	256 gradation / 16.7 million colours
Format	JPEG
Image file size	Supported maximum 3MB
Colour print size	Regular 100 x 150mm (4" x 6"). Panorama 100 x 282mm (4" x 11.1"), 100 x 417mm (4" x 16.4")
Printing time	55 sec
Dimensions	176(W) x 155(D) x 102(H)mm
Weight	1.4kg

ANDROID® COMPATIBLE - CAT. XC-5067

Dock compatible with Android® Smartphone (OS 2.0 and above only). USB compatible with digital cameras (PictBridge). Download the "Bolle Photo Plus" App from the Google® Play store.



NEW LOW PRICE

Smartphone not included



↑	Cat.	Qty 1+
Android® Compatible	XC-5067	\$99.95
36 Photo Cartridge Refill	XC-5069	\$14.95

WEB CAMERA

HIGH DEFINITION 720P WEBCAM

Quickly whip up a 720p video for your next website on YouTube. Featuring a five-layer lens, high-resolution CMOS sensor. Can be used for video conferencing or webcam chat.

- HD 720p video recording (Max Resolution 1280 x 720)
- High quality 5MP wide angle lens
- Multi-functional clip
- Built-in high sensitive stereo microphone
- Up to 12MP photo resolution (Software enhanced)
- Multi-utility camera base for CRT, laptop or LCD monitor
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.4+, Linux



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
720p	QC-3203	\$34.95	\$31.45	\$27.90

HIGH DEFINITION 1080P WEB CAMERA

A high resolution web camera for Skype, making YouTube videos, and other on or offline activities. The unit has an inbuilt mic so you don't have to wrap a clunky headset around your head when video chatting online. It's capable of taking 12MP still images (Software enhanced). The foldable stand allows it to comfortably sit on top of a CRT, laptop or LCD monitor.

- Full HD1080p Video Recording (Max Resolution 1920 x 1080)
- High quality 5MP lens
- Multi-functional clip with 360 degree rotation
- Built-in high sensitive stereo microphone
- Snap shot button for image capture
- Up to 12 Mega Pixel image capture. (Software enhanced)
- 360 degree rotation
- Built-in microphones with automatic noise reduction
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.4+, Linux



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
1080p	QC-3205	\$39.95	\$35.90	\$31.90

PC SECURITY

COMBINATION NOTEBOOK CABLE LOCK

As easy as typing in four digits to unlock your phone, this laptop security cable has a four digit combination that you can customise for security. It's 1.8m long and has a swivel on the end so moving it around your desk area will not be a problem.

- 1.8m long
- 4 digit combination
- Steel lock mechanism



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	XC-4639	\$16.95	\$14.95	\$13.35

LAPTOP COOLING - USB POWERED

DUAL FAN NOTEBOOK COOLING FAN

Prevents your notebook from overheating on your lap or desk. Features a double 140mm fan and 2 USB ports. It is super silent and you will hardly notice it is there. Incredibly simple to use, just plug into your USB port and away you go! Also includes a push button on and off switch.



- Unique non slip design
- Rated voltage: 5VDC
- Dimensions: 365(L) x 295(W) x 40(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
Dual Fans	XC-5211	\$15.95	\$14.35	\$12.70

UNIVERSAL CPU COOLER WITH PWM FAN

This low noise top flow design cooler contains a silent 92mm fan with an intelligent PWM (Pulse Width Modulation) control. It is compatible with most widely used AMD motherboard CPU socket types, and has the cooling power to make sure your CPU runs smoothly. Its compact size makes it ideal for HTPC and small chassis PCs. Easy to install.

NEW
2015

Compatible with: Intel® socket 775, 1155, 1156 CPU up to TDP 82W, Pentium® D/Pentium® 4/ Celeron® D, Pentium Dual-Core, Core 2 Quad/Core 2 Duo, Core i3/i5, AMD® Socket 754/939/AM2/AM2+/AM3/ AM3+/FM1, CPU up to TDP 82W, Athlon 64 X2, Athlon 64, Athlon II, Opteron, Sempron

Specifications	YX-2588
Air flow (CFM/CMH)	30.5/51.85 max
Bearing	Hydro Dynamic Bearing
Cable length	250mm
Current	0.13A
Voltage	12VDC
Fan speed	900-2200RPM
Life time MTTF at 40°C (h)	50,000
Noise level	10-22.5dBA
Dimensions	120(L) x 96(W) x 66(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
CPU Cooler	YX-2588	\$24.95	\$22.50	\$19.95

NOTEBOOK LIGHTS

FLEXIBLE 10 LED USB LIGHT

A handy reading assistant for laptops, Tablets or PCs. The light is connected to a flexible gooseneck and can be positioned in a variety of ways. Just touch the back of the light to switch it on or off. Convenient to illuminate a book or some notes on your desk.

- 300 lux
- 10,000 hour led life

Specifications	ST-2807
Operating voltage	5VDC
Approx	160mA
Gooseneck length	315(L)mm
Light dimensions	133(L) x 21(W)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
300 Lux	ST-2807	\$14.95	\$13.35	\$11.70

4 LED BOOK/LAPTOP READING LIGHT

A very bright book light that clips on the top or bottom of the page. The 4 LEDs provides an even light dispersion that is easy on the eyes. It's also a great travel companion for when you find yourself on a bus or train and only have a good book to keep you company.

Specifications	ST-3206
Colour temperature	5600-6000K
Illumination	150 Lux
Lumens	17
Usage time	5 hours
Requires	2 x AAA batteries
Battery run time	5 hours
Dimensions	95(L) x 35(W) x 14(D)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
150 Lux	ST-3206	\$19.95	\$17.70	\$15.70

USB HUBS

A range of USB 2.0 hubs for any budget or application. Powered by the USB port and all include a lead.

USB 2.0 4 PORT STAR HUB

Star shaped 4 port hub. Compact design to reduce desk clutter with power indication LED.



- Compatible with Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 50(W) x 50(L) x 15(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
USB 2.0 4 Port	XC-4302	\$12.95	\$11.35	\$10.35

REVERSIBLE USB 2.0 4 PORT HUB

No more second guessing which way to insert your USB cable. You can insert your cable either way. Connect up to four devices.



- Insert your USB cable either way
- Portable - easily stores away when travelling
- USB 2.0 compliant
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux

	Cat.	Qty 1+	Qty 4+	Qty 10+
USB 2.0 4 Port	XC-4304	\$19.95	\$17.70	\$15.70

USB 2.0 MINI 4 PORT HUB

Add up to four USB peripherals without loss of speed.



- 5VDC 2A required for powered option
- Compatible with Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 83(W) x 16(H) x 32(D)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
USB 2.0 4 Port	XC-4864	\$19.95	\$17.70	\$15.70

USB 2.0 10 PORT USB HUB

Ten, count 'em, ten USB ports. That should be enough for anyone. The two position switch turns all ports on, or only ports 7 - 10. This means you can turn off non-essential peripherals while maintaining power to others - LED indicators tell you which group is live. 5VDC 3A plugpack included for powered operation.



- USB 2.0
- USB or mains powered
- Key holes for wall mounting
- Compatible with Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.2+, Linux
- Dimensions: 172(L) x 36(W) x 27(H)mm

	Cat.	Qty 1+	Qty 4+	Qty 10+
USB 2.0 10 Port	XC-4946	\$54.95	\$49.45	\$43.90

USB 3.0 4 PORT MINI HUB

This portable and easy to use 4 Port USB 3.0 Hub offers 10 times faster transfer speed than USB 2.0 devices. Ideal for home, office and travel.

NEW
2015

Specifications	XC-4952
Interface	USB 3.0
Transfer Speed	80Mbps
Compatibility	Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.0+, Linux
Dimensions	61(L) x 61(W) x 10(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
USB 3.0 4 Port	XC-4952	\$29.95	\$26.95	\$23.70

STORE DETAILS

For store locations and opening hours see the back cover of this catalogue or download our "Store Locator App".



KEYBOARDS

BLACK QWERTY USB KEYBOARD

This incredibly flat and light QWERTY keyboard is plug & play and simple to use. Change the inclination with the two stands that are discreetly tucked away on the sides.



- Supports API or APM II
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 452(L) x 161(W) x 20(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5146	\$9.95	\$8.75	\$7.75

ROLL UP QWERTY KEYBOARD

A flexible and virtually indestructible QWERTY keyboard.

The moisture-resistant silicone allows you to spill as much as you like with no effect on function. Dropping donut crumbs into more traditional keyboards requires tediously removing keys to clean out the mess.



The bendable silicon allows for easy transportation and the material creates a soundless typing experience. Perfect for industrial or wet areas such as factories, labs, workshops, restaurants, shops and food preparation areas. As it rolls up into a compact bundle, it's also ideal for travellers.

- USB interface
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Can be rolled up to 135(H) x 80(Dia)mm
- Laid out dimensions: 405(W) x 135(D) x 10(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5172	\$18.95	\$16.95	\$14.95

2.4GHZ WIRELESS KEYBOARD & MOUSE

An all-in-one wireless keyboard and mouse solution perfectly suited to home or office PC applications. Features Qwerty keyboard and an ergonomically designed precision mouse with scroll wheel. A nano sized USB receiver is tucked into the base of the mouse for connection to your PC.



- Operating range: Up to 10m
- Operates on the 2.4GHz spectrum
- Mouse: 2 x AAA batteries (included)
- Keyboard: 1 x AAA battery (included)
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Keyboard dimensions: 435(L) x 125(W) x 18(H)mm

⬆	Cat.	Qty 1+	Qty 4+	Qty 10+	
	Wireless Keyboard & Mouse	XC-5174	\$29.95	\$26.90	\$23.70

BLUETOOTH® FOLDABLE KEYBOARD

One of the niftiest products we have seen in a long time! This full 66 key keyboard folds in half from a 285mm to a modest 133mm so it's easy to transport without damaging the keys.



- 17mm pitch and 3.3mm tactile push feel
- 10,000,000 life cycle
- Bluetooth®
- Super long standby - up to 2 months
- Requires 1 x AAA alkaline battery
- Supports Mac OS® X(10.5-10.5.8, 10.6-10.6.7), iPad2®, iPad®, iPhone4®, iPhone 3GS®, the fourth generation of iPod Touch®, the third generation of iPod Touch® (32GB, 64GB) Playstation3® (software version 3.66)
- Dimensions
- Folded: 133(L) x 100(H) x 24(D)mm
- Open: 285(L) x 100(H) x 12(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	XC-5202	\$29.95	\$26.90	\$23.70

MINI WIRELESS KEYBOARD WITH TRACKBALL

Perfect for use as an advanced "remote control" for your Internet enabled TV or home media PC. Navigating through web pages on the big screen from the couch will need more than your standard up/down/left/right remote. This handy keyboard features the full QWERTY key layout and a brilliant little trackball and mouse scrollwheel. It also has those handy media shortcut keys, play, pause, fast forward/rewind and volume controls etc. Operates on the popular 2.4GHz band for easy wireless access. Includes nano sized USB dongle.



- Features a low battery power LED indicator
- Operation range: 9m
- Requires 2 x AAA batteries (included)
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 261(L) x 112(W) x 30(H)mm



⬆	Cat.	Qty 1+	Qty 4+	Qty 10+
Wireless	XC-4943	\$49.95	\$44.90	\$39.90

MINI BLUETOOTH® KEYBOARD WITH BUILT-IN TRACKBALL & SCROLL WHEEL

Make typing a breeze with our compact, wireless QWERTY keyboard. Use Bluetooth® to connect it to a wide variety of mobile phones, tablets, smart TVs, media centres or PCs. Effortlessly navigate and control your onscreen interface with the built-in trackball and scroll wheel. Or sit back in your favourite arm chair, relax and enjoy your favourite TV shows or movies using the media shortcut keys. Note: full functionality of the keyboard may be limited by your device.



- Low battery power LED indicator
- Operation range: 10m
- Includes 2 x AAA batteries
- Dimensions: 261(L) x 112(W) x 30(H)mm



⬆	Cat.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	XC-4945	\$49.95	\$44.90	\$39.90

LET'S PLAY!

USB GAMING KEYBOARD

This gaming keyboard provides optimum performance and accuracy when playing high intensity games. The tangle-free braided cable keeps things organized and prevents kinks, tangles, and snags. Simply immerse yourself in your favourite game!



- Braided cable
- 12 multimedia keys
- Dimensions: 450(L) x 195(W) x 30(H)mm

Product may vary from the one shown



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5130	\$49.95	\$44.90	\$39.90

USB GAMING MOUSE

Every gamer needs one of these 5 button gaming mice with its intuitive design. Dedicated CPI (Count Per Inch) button to adjust pointer speed without the need to go into settings, so you can quickly change sensitivity while in-game. The wire is braided to minimize friction for optimal performance and accuracy, it also prevents annoying tangling.



Product may vary from the one shown



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XM-5250	\$39.95	\$35.90	\$31.90

MICE

BUDGET 3-BUTTON OPTICAL MOUSE

A low profile, ergonomic 3-button optical mouse. Simple and easy to use.

- Resolution: 1000 DPI
- Zoom-in, zoom-out; page up, page down
- Plug and play
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XM-5243	\$9.95	\$8.75	\$7.75

USB 5-BUTTON OPTICAL MOUSE

All the normal mouse functions - left and right click, scrolling, plus forward, back and quick-launch button as well as a scroll wheel. Ergonomically shaped for fatigue-free use.

- Resolution: 800/1200/1600
- Plug and play - no drivers required
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XM-5241	\$17.95	\$15.95	\$14.35

5-BUTTON WIRELESS OPTICAL MOUSE

A compact, 5 button wireless optical mouse with nano dongle that tucks away neatly into the base. Great for travellers.

- 2.4GHz Wireless
- 1000/1500/2000 DPI conversion with indicator
- 4th and 5th buttons can be custom assigned functions after driver installation
- Multi-stage power saving modes
- Plug and play
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XM-5248	\$24.95	\$22.35	\$19.70

COMPUTER MOUSE PAD

Great tracking for all mice types. Made from a blend of Polyester and Spandex and only 2mm thick.

- Non-skid surface holds the mat in place
- Black in colour
- Dimensions: 260(W) x 200(H) x 2(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XM-5099	\$3.95	\$3.55	\$3.15

MEMORY CARD READERS

COMPACT USB2.0 MULTI-CARD READER

Designed for convenience this USB multi-card reader is small enough to attach to your keyring. Despite its size it accepts a wide variety of popular formats. To use simply fold out the USB adaptor, fold back for easy storage or travel.

- Fold away USB adaptor
- Supported card formats: MS/MS Pro Duo/ M2/T-Flash/MicroSD/SDHC/SD/MMC/RS MMC/Mini SD
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 40(L) x 34(W) x 15(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4749	\$12.95	\$11.35	\$10.35

OTG (ON-THE-GO) MICRO B CARD READER

Use this card reader to playback movies, view photos, and transfer files to and from your Android phone or Tablet. Great for travellers who want to be able to backup their library of photos/videos quickly or for those who like watching movies on the go but simply don't have the storage space on their Smartphone/Tablet for such large files. Requires no external power supply.

- USB Micro B plug
- Requires Android 4.0 or above
- Features a slot for a standard SD card and one slot for a microSD card
- Dimensions: 38(W) x 19(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	WC-7738	\$9.95	\$8.75	\$7.75

ALL-IN-1 CARD READER

This USB card reader reads most memory cards in use today, including:

SD, MicroSD, SD Ultra II, SD Extreme III, MMC, MMC II, MMC 4.0, RS-MMC, HS RS-MMC, MMC Micro, M2, MS, MS Pro, MS Pro Duo, MS Extreme Pro, MS Extreme III Pro, MS Ultra II Pro, HS MS-MG Pro HS MS-MG Pro Duo, MS ROM, MS Select, XD, XD(M), XD(H), CF I & II, CF Ultra II, CF Extreme III, CF Extreme, HS CF & Micro-drive.

- Plug and play
- USB 2.0
- USB cable included
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Size: 68(L) x 40(W) x 13(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4926	\$19.95	\$17.70	\$15.70

LET'S PLAY!

GAMING HEADPHONES WITH ADJUSTABLE MICROPHONE

A gaming headset designed for hardcore gamers who enjoy many hours of game-play and demand superior gaming audio, clarity, and bass. They are comfortable and adjust to different head sizes, look great and feature a microphone that swivels 120-degrees. The microphone tucks away out of view when not required. The braided fabric audio lead is over 2m long and incorporates a volume control and mic mute switch.

Headphone	
Driver Diameter	40mm
Frequency Range	20Hz - 20kHz
Sensitivity	114dB ± 3dB
Impedance	32Ohm
Max. Input power	30mW
Microphone	
Mic. Diameter	6.0 x 5.0mm
Sensitivity	-38dB ± 3dB
Directivity	Omnidirectional
Plug type	2 x 3.5mm stereo
Cable length	2m



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AA-2126	\$49.95	\$44.90	\$39.90

GAMING CONSOLE TOOL KIT

If you have ever attempted any repair or improvement on your gaming console, you know that the right tools can make the difference between a good experience and a bad one. Everything you need to get into your console and accessories. It includes tools for pretty much every console and handheld on the market today - Wii, X-Box, Playstation etc. Carry case included.

- Contents:
- PH000, PH00, PH0, PH1
 - Slotted 2, 3, 4mm
 - T4, T5, T6, T8, T10, T15, T20, TA2, TA2.3
 - TRI00, TRI0, TRI1
 - Nintendo & X-Box security bits, X-Box opening tool
 - Stainless tweezers, ratchet handle and adaptor



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TD-2109	\$29.95	\$27.95	\$23.70

MEMORY CARD READERS & VOICE RECORDERS

MEMORY CARD READERS (CONTINUED)

USB 3.0 SDXC/MICROSD MEMORY CARD READER

Transfer data between your PC and SD/microSD memory cards with this USB 3.0 card reader which has the ability to read both card slots simultaneously. Powers directly from your USB port and is backwards compatible with SDHC and all older versions of the SD/microSD card formats.

Supported Memory Cards:

SD Slot:

Secure Digital (SD), Elite Pro SD, Extreme III SD, Gaming Edition SD, Platinum II SD, SD Pro, SDHC, SDXC, SD-Max, SD-Pleomax, SD-Pro C, Super SD, Turbo SD, Ultima I SD, Ultima II SD, Ultimate SD, Ultra High Speed SD, Ultra II SD, Ultra II SD Plus, Ultra SD, Ultra-X SD, OV-RS MMC, High Speed MMC I RS-MMC, MCCmobile, MMC Pro, MMCplus, MMCplus Turbo, RS-MMC

microSD Slot:

microSD (TransFlash), microSDHC

Specifications	XC-4752
Interface	USB 3.0
Transfer Rate	up to 80Mbps
Supported Card Size	up to 512GB SDXC, 256GB microSD
Compatibility	Windows® 8.1, 8, 7, Vista®, XP, Mac OS® X 10.0+, Linux®
Dimensions	79(L) x 35(W) x 9(D)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4752	\$19.95	\$17.70	\$15.70

USB 3.0 MEMORY CARD READER

This card reader accommodates all the mainstream memory cards including the new SDXC and CF600x standards.

- Includes 1 x USB 3.0 cable
- LED indicator
- Hot swappable
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS® X 10.0+, Linux
- Dimensions: 86(L) x 58(W) x 21(D)mm

- Supports the following memory cards:

CF Slot:

Compact Flash Type I/II, CF Elite Pro, CF PRO I, CF PRO II, CF Turbo, CF Ultima I, CF Ultima II, Extreme CF, Extreme III CF, HS CF, Ultra II CF

MS Slot:

MS, MS DUO, MS PRO, MS PRO DUO, MS MagicGate, MS MagicGate PRO, MS MagicGate DUO, MS MagicGate PRO DUO, Extreme MS PRO, Extreme III MS PRO, Ultra II MS PRO, HS MS MagicGate PRO HS MS MagicGate PRO DUO, MS ROM, MS Select

SD Slot:

SecureDigital (SD), Elite Pro SD, Extreme III SD, Gaming Edition SD, Platinum II SD, SD Pro, SDHC, SDXC, SD-Max, SD-Pleomax, SD-Pro C, Super SD, Turbo SD, Ultima I SD, Ultima II SD, Ultimate SD, Ultra High Speed SD, Ultra II SD, Ultra II SD Plus, Ultra SD, Ultra-X SD, DV-RS MMC, High Speed MMC/ RS-MMC, MCCmobile, MMC Pro, MMCplus, MMCplus Turbo, RS-MMC

Micro SD / M2 Slot: MicroSD (TransFlash), microSDHC / M2

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4757	\$34.95	\$31.45	\$27.90

WI-FI MULTI CARD & USB READER

This clever device creates a secure Wi-Fi hotspot so you can share and transfer files from your memory cards and USB storage devices wirelessly between your computers, Tablets, and Smartphones. It has an internal rechargeable battery so you can use it for up to 3 hours without power. If you connect a 3G USB dongle the device will become a 3G router allowing internet access for Wi-Fi devices. It has been tested on HDD up to 1TB. Supplied with USB to Micro-B USB power/charge cable.

- Simultaneously read/write - CF, SD, MS, M2, TF and microSD
- Simultaneously read/write to 3 USB devices
- Up to 20m Wi-Fi range
- Up to 8 users can access simultaneously
- 1000mAh rechargeable battery for up to 3 hours wireless use

Recommended apps for transferring files from your portable devices:

- iOS - WDFPlayer
- Android - ES File Explorer
- Dimensions: 105mm x 65mm x 11mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8426	\$69.95	\$62.95	\$55.95

DIGITAL VOICE RECORDERS

512MB DIGITAL VOICE RECORDER



Record up to 270 hours of voice, notes or music. Three recording options are available - high quality, long play or short play with either manual or voice-activated recording.

You can either play back through headphones or use the included software to play, save or edit the audio files on your PC. An LCD screen keeps track of everything you record and it can also be used as an MP3 player.

- USB cable, software, earphone, external MIC and AV lead included
- External mic input
- Requires 2 x AA batteries
- HQ, LP and SP recording modes
- Date and time-stamped recordings
- Compatible with Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.4+, Linux
- Dimensions: 111(L) x 28(W) x 14(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
512MB	XC-0381	\$54.95	\$49.45	\$43.90



SEE PAGE 381 FOR OTHER MP3 ENCODERS

4GB DIGITAL VOICE RECORDER

With expanded capacity of 4GB and stereo capability, this recorder is ideal for the roving muso to quickly record musical ideas in either HQ, LP and SP and to play back MP3 tracks. Play back through headphones or the built-in speaker. Also great for students and business meetings.

- Up to 1080 hours recording
- Supports MP3/WMA/ACT formats
- Built in lithium ion battery
- USB cable, CD driver, user manual, earphone, external MIC
- Compatible with Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.4+, Linux
- Dimensions: 85(L) x 34(W) x 11(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
4GB	XC-0383	\$99.95	\$89.95	\$79.95

USB INTERFACE / DATA CABLES

USB MIDI INTERFACE CABLE

Connect any MIDI device to your computer: keyboards, controllers, instruments, sound cards, samplers, drum machines etc. Plug and play, no software or drivers required. MIDI in and MIDI out connectors with LED indication.

- Compatible with Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Cable is 2 metres long.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4934	\$29.95	\$26.90	\$23.70

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Shop for all these Jaycar Electronics products online at our website - and check out our latest products and special offers!



CONVERT VIDEO TAPE TO DIGITAL

ECONOMY DVD MAKER

An easy to connect USB to video adaptor which allows you to capture high quality video and audio through a USB 2.0 interface to burn your own high definition DVD/VCDs. It's capable of real time recording MPEG 4/2/1 video formats. The compact size makes it ideal to take along anywhere. Operating couldn't be easier; with the one touch grabber; simply push the button to start and push again to stop.

System requirements

- Pentium-IV 1.6GHz or higher (recommended)
- 256MB RAM
- Graphics card (must support DirectX 9.0c)
- Sound card
- 1GB free HD space
- Windows 8.1, 8, 7, Vista, XP, 2000



Specifications	XC-4991
Interface	USB 2.0
Video Input	Composite (RCA), S-Video
Audio Input	RCA Audio in
Capture video sources	VHS, V8, Hi-8, etc
Video & video formats	DVD, SVCD, VCD, MPEG-4, AVI, WMV, WMA, MP3
Image formats	JPEG, BMP
Compatibility	Windows 8.1, 8, 7, Vista, XP, 2000
Dimensions	52(L) x 50(W) x 27(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4991	\$39.95	\$35.90	\$31.90

USB 2.0 DVD MAKER

Turn your aging collection of VHS and Betamax video tapes into new video productions or record live video straight to your DVD or CD burner. This powerful video recording and editing system will help you make your own DVD movies or family documentaries and uses the latest MPEG-4 compression to produce high-quality real-time recordings from practically any AV source. The powerful editing software lets you add colour and transition effects as well as sound tracks and titles to your work. Send copies of your completed movies on DVD or VCD to your friends and family and keep them up-to-date with the goings-on at home. The USB interface makes connection a snap so you can be making movies and editing them in no time. Powered by the USB connection.



- Supports USB 1.1 & 2.0 Plug-and-Play
- Resolution up to 720 x 576 @25 fps (PAL) or 720 x 480 @30fps (NTSC)
- Composite Video input via RCA connector or S-Video mini-DIN
- Stereo audio input via RCA connectors
- Audio output via 3.5mm stereo plug
- Capture box: 35(W) x 95(D) x 15(H)mm
- Compatible with Windows 8.1, 8, 7, Vista, XP, Mac OS® X 10.5+

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4867	\$59.95	\$53.95	\$47.90

BUSINESS CARD SCANNER

USB BUSINESS CARD SCANNER

Scan and organise business card contacts simply to your computer. It is powered by USB and uses a 2MP sensor with fixed focus to capture clear images. The included Optical Character Recognition software extracts text from the business card then categorises the information into different fields, which can be linked to your mail client (eg. Outlook). Compact and portable, and doubles as a webcam with microphone. Supplied with a mini USB lead.

- Export to mail clients like Outlook
- Identifies text fields for Company name, Address, Phone number and more
- Supports multiple languages
- Sensor: 2MP
- Interface: USB 2.0
- Still Image: BMP/JPG
- Illumination requirements: 150 to 2 Lux
- Compatible with Windows 8.1, 8, 7, Vista, XP, Mac OS® X 10.4+, Linux
- Dimensions (folded): 95(L) x 37(W) x 14(D)mm



↑	Cat.	Qty 1+
	QC-3130	\$19.95

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

PRESENTATION AIDS

KEYRING LASER POINTER

This laser keyring pointer is chrome plated, and has a keychain attached. Requires 3 x LR44 batteries, which are supplied.

- Very small, only 70mm long x 13mm dia
- Wavelength 670nm / Max output < 1mW
- Do not stare into beam

This laser pointer has passed Australian Standards for laser pointers. AS/NZS 2211.1:1997.



↑	Cat.	Qty 1+	Qty 5+	Qty 10+
	ST-3102	\$14.95	\$13.35	\$11.70

TECH TALK!

Laser radiation. Do not stare into beam. Class 2 laser products

PEN STYLE RF PRESENTER WITH LASER POINTER

For professionals such as teachers and lecturers who frequently use PowerPoint presentations but don't want to be tied to their computer. You can cycle back and forward through slides, blank the screen (PowerPoint only), or use the units laser to highlight key points in presentations. Hassle free plug and play, no need for fiddling with installation. The USB receiver is integrated into the pen unit for easy transportation and usage. The receiver unit conveniently includes a MicroSD card slot you can use it as an MicroSD card reader.

- Compatible with Windows and Mac®
- Control distance: Up to 10m
- Laser distance: Up to 200m
- Laser wavelength: 650nm
- Battery: Requires 1 x AAA (included)
- Dimensions: 133(H) x 22(W) x 17(Dia)mm



This laser pointer has passed Australian Standards for laser pointers. AS/NZS 2211.1:2004.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5410	\$34.95	\$31.45	\$27.90

PLUG-IN LASER POINTER FOR IPOD®/IPHONE® WITH APP

Simply plug this nifty device into the headphone socket on an iPhone®, iPod®, or even iPad® and it becomes a convenient laser pointer. A great tool for teachers, lecturers, or for use in business presentations. The free iOS app allows you to flash the laser at certain intervals or adjust the brightness. It also double as a stylus for finer control of your touchscreen.



This laser pointer has passed Australian Standards for laser pointers. AS/NZS 2211.1:2004.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5412	\$19.95	\$17.70	\$15.70

WIRELESS PRESENTER WITH TRACKBALL MOUSE & LASER

An advanced presentation tool for cycling through slides or software demonstrations. Functions include page up/down, laser pointer, trackball, mouse right/mouse left. Pressing the trackball acts as a mouse left button for triggering actions on a web interface or other program. A small USB receiver is located inside the remote, just remove it and connect to a computer. Totally plug-and-play so there is no need for any software setup. It will also read microSD cards!

Specifications	XC-5413
Frequency	2.4GHz
Card reader	microSD
Control distance	Up to 10m
Trackball resolution	400DPI
Laser output	1mW
Power	Includes 2 x AAA batteries
Laser distance	200m
Compatibility	Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
Dimensions	120(L) x 33(W) x 25(H)mm



This laser pointer has passed Australian Standards for laser pointers. AS/NZS 2211.1:2004.

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5413	\$59.95	\$53.95	\$47.90

MONITOR BRACKETS

MONITOR BRACKETS

LCD COMPUTER SCREEN DESK BRACKETS

Desk space, the final frontier. If your desk is clogged with notes, manila folders and finding space is becoming a dangerous balancing act, then you need an LCD bracket. These brackets use a C-type clamp for a powerful lock onto a variety of desk thicknesses. The monitor can swivel horizontally, tilt vertically, and extends to approximately 400mm from the base. For an extra bit of customisation, the monitor can be rotated from portrait to landscape,

which is especially useful for the double screen model. To bolster desk neatness, easy to open cable clips run along the structure of the bracket to house your DVI cable, monitor power cable or any other cable that requires monitor connection. Both brackets feature a sleek matte black finish for an inconspicuous blending into your desk motif. Suitable for monitors up to 27".



SINGLE SCREEN LCD BRACKET

- VESA mounting (75mm x 75mm and 100mm x 100mm)
- Fully adjustable arms
- Rotate monitor from landscape to portrait

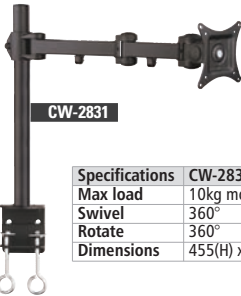
DOUBLE SCREEN LCD BRACKET

- VESA mounting (75mm x 75mm and 100mm x 100mm)
- Fully adjustable arms
- Rotates from landscape to portrait

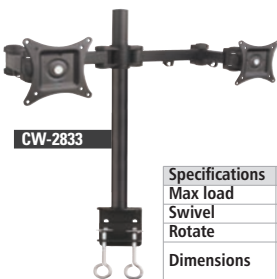
Note: Monitor not included



FOR OUR FULL RANGE OF MONITOR MOUNTING HARDWARE SEE PAGE 406



Specifications	CW-2831
Max load	10kg monitor
Swivel	360°
Rotate	360°
Dimensions	455(H) x 490(L)mm



Specifications	CW-2833
Max load	10kg monitor
Swivel	360°
Rotate	360°
Dimensions	455(H) pole height, each arm 490mm(L)



Note: Monitors not included



	Cat.	Qty 1 +	Qty 5 +	Qty 10 +
Single Screen Bracket	CW-2831	\$49.95	\$44.90	\$39.90
Dual Screen Bracket	CW-2833	\$69.95	\$62.95	\$55.95

SINGLE LCD MONITOR DESK STAND

Features a big sturdy base designed to keep your desk clutter free and monitor at eye level. Cable management allows you to run your power and video leads down the structure of the stand to keep your workspace clear of cables. Black powder coated finish will ensure it doesn't get scratched too easily. There is also the option of bolting it to a desk (will require drilling) if you require a more permanent installation. An M10 bolt with washer is supplied.

- VESA mounting (75mm x 75mm and 100mm x 100mm)
- Recommended monitor size: 13-27" using securing bolt; up to 22" using free standing base
- Tilt: Up 90°, down 45°
- Rotate: 360°
- Dimensions: 490(H)mm pole, 270(L)mm arm



Monitor not included



	Cat.	Qty 1 +	Qty 5 +	Qty 10 +
Desk Mount	CW-2839	\$79.95	\$71.95	\$63.95

ARTICULATING MOUNTING ARMS TO SUIT APPLE® IMACS® & DISPLAYS

In keeping with the stylish nature of Apple® products, we introduce two very stylish articulated mounting arms. Both are white in colour, one desk mount, the other wall mount. Both conform to the unique rear mounting arrangements of the Apple® product.

Note: To remove your current iMac® stand you must slide a thin piece of plastic or cardboard in the stand socket, this will switch a lever (you should hear an audible click) so you can turn the stand and expose screws. Then remove all screws and the stand can be taken off for attachment to the bracket.

Both units will carry 14 kilograms at the maximum lift of 371mm. The maximum extension is 663mm for CW-2870 and 680mm for the CW-2871.

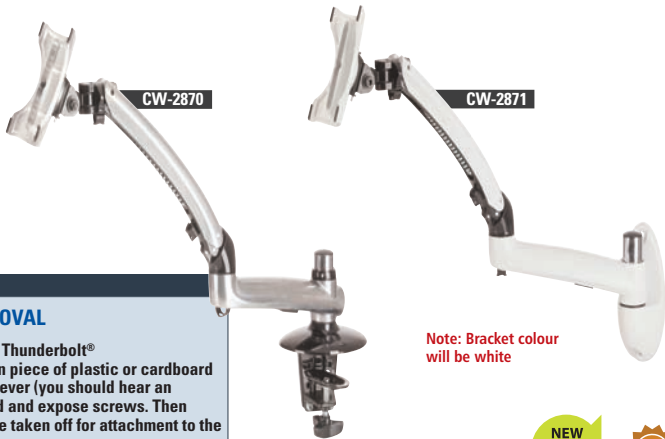
Compatibility:

- 27" Thunderbolt® Display
- 24" - 27" LED Cinema Display
- 24" iMac® (aluminium & glass)
- 27" iMac®

TECH TALK!

APPLE® DISPLAYS STAND REMOVAL

Note: To remove your current iMac® or Thunderbolt® LCD Monitor stand you must slide a thin piece of plastic or cardboard in the stand socket, this will switch a lever (you should hear an audible click) so you can turn the stand and expose screws. Then remove all screws and the stand can be taken off for attachment to the bracket. See our website for a video.



Note: Bracket colour will be white



	Cat.	Qty 1 +
Desk Mount	CW-2870	\$59.95
Wall Mount	CW-2871	\$47.95

CLEANING SYSTEMS

CD/VCD/DVD LENS CLEANER

If you experience jumping, loss of quality or disc failure, then it's probably because your lens are dirty. This easy to use laser lens cleaner not only cleans your CD or DVD equipment, but it also shows a short animation while you wait. Supplied in a jewel case.



	Cat	Qty 1+	Qty 4+	Qty 10+
	AR-1416	\$11.95	\$10.70	\$9.50

SCREEN CLEANER KIT FOR SMALL DEVICES

This handy screen cleaner is suitable for all small screens including iPhone®, mobile phones and cameras. The unique cleaning solution removes fingerprints, dust and stains without scratching the screen. Supplied with a washable microfibre finger cloth and a 12ml cleaning solution bottle. Small and compact design.

- Drip-free cleaning solution
- Includes 12ml cleaning solution bottle
- Dimensions: 90(H) x 45(W) x 22(D)mm



iPhone® not included

	Cat.	Qty 1+	Qty 4+	Qty 10+
	AR-1415	\$4.95	\$4.45	\$3.90

LCD SCREEN CLEANING KIT

Keep your computer, TV and other LCD screens clean. Remove dust and fingerprints without streaking, scratching or staining.

- Elastic anti-static brush
- Special microfibre material which is capable of preventing panel scratch and will not harm LCD protective coating



	Cat	Qty 1+	Qty 4+	Qty 10+
	AR-1418	\$11.95	\$10.70	\$9.50

IP & STAND ALONE CAMERAS

MINI RECHARGEABLE WI-FI IP STICK CAMERA

This extremely small Wi-Fi camera allows you to stream and record video with audio over your network to your Smartphone (iPhone® or Android® device) or laptop, or to an external microSD card (sold separately) to play back later. It is powered by a built-in rechargeable battery, and includes 3 x versatile camera mount options for different applications. A USB charging cable, microSD card USB adaptor, weatherproof casing, and even a neck strap is supplied.

Specifications	QC-3850
Camera	1.3M CMOS
VGA	640x480 up to 30fps
Focal distance	2.8mm
Video Recorder	Motion JPEG
Wireless Range	up to 50m
Support	iOS®, Android Smartphones
Microphone	Built-in
Output Interface	1 x Mini USB, 1 x microSD Card Slot
Support Storage	microSD Card supports up to 32GB (not included)
Power Interface	DC 5V 800mA
Dimensions	57(H) x 20.5(W) x 20.5(D)mm



Wi-Fi Enabled



	Cat.	Qty 1+	Qty 2+	Qty 4+
1.3MP Wi-Fi	QC-3850	\$109.00	\$89.95	\$84.95

720P HIGH DEFINITION P2P WI-FI CAMERA

This HD camera with Wi-Fi support allows you to set up a surveillance system without confusing cables. The P2P function makes it easy and simple to connect, without the need for confusing port mapping, DNS, and IP address settings. Using your Smartphone you can log in to view what is happening in your home or office anywhere, anytime! The camera features an IR-cut filter to provide a true colour experience, and can be easily configured to automatically email and/or upload images to an FTP server at defined intervals or when motion is detected. Supplied with mains power supply and supports up to 32GB microSD card (available separately).

Specifications	QC-3840
Image sensor	1/4" colour CMOS sensor
Viewing Angle	60°
Audio	Two way
Infrared light	8 IR LEDs with up to 15m night visibility
Resolution	1280 x 720 (720p), 640x480 (VGA), 320x240 (QVGA)
Power	5V/2.5A DC, 1.5m, 5W (Mains adaptor included)
Supports	iOS®, Android® Smartphone
Dimensions	125(H) x 100(W) x 95(L)mm



Wi-Fi Enabled



	Cat.	Qty 1+	Qty 2+	Qty 4+
720p Wi-Fi	QC-3840	\$159.00	\$142.95	\$134.95

720P WI-FI IP CAMERA

This small and portable Wi-Fi IP camera is able to help you monitor your home to make sure it's safe and secure. Featuring a speaker, microphone and with its small size and easy installation, this video and audio capable IP camera works perfect using an Android® Smartphone, Apple® iPhone® or iPad®. It can also records video to a microSD card (available separately).



NEW
2015



Wi-Fi Enabled

TECH TALK!

View live footage on a Smartphone



Specifications	QC-3854
Image sensor	1.3 MP CMOS/720p
Lens	Aperture (F2.5), Effective focal length (f=2.8mm), view angle: 110°
External memory	microSD, support microSDHC card up to 32GB
Interface	Micro USB
Power adaptor	5V/1A
Display resolution	1280 x 720 @ 15fps (default, up to 25fps), 640 x 360 @ 18fps (default, up to 25fps)
Software	Guard app. for Smartphone and Tablet (iOS®/Android®)
Dimensions	105(L) x 55(W) x 25(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
720p Wi-Fi	QC-3854	\$99.95	\$88.95	\$84.95

CAMERAS FOR FUN

WARNING!

These cameras should not be placed in areas where there is an expectation of privacy. Such places typically are: bathrooms, bedrooms, toilets, dressing rooms etc.. Use of these devices in such locations, can lead to criminal prosecution and severe penalties.

HIGH DEFINITION VIDEO RECORDER HIDDEN IN "HOLLYWOOD DIRECTOR" STYLE GLASSES.

The most realistic covert spy glasses we have come across. Other units available on the market are big and bulky and just look plain tacky. These 720p high definition digital video recorder glasses not only look like a real set of spectacles, but are also very stylish. The camera lens is virtually impossible to see located in the bridge of the nose of the ultra flexible frame. Features 8GB of built-in memory, rechargeable battery and a discreet on and off switch.

- Recharge batteries by USB
- View angle 62 degrees, 1 LUX
- USB 2.0 interface



Specifications	QC-8022
Video format	AVI
Recording time	Up to 70 mins (continuous), 90 mins max
Video Resolution	640x480 / 1280x720 @ 30fps

Warning: These cameras should not be placed in areas where there is an expectation of privacy. Such places typically are: bathrooms, bedrooms, toilets, dressing rooms etc.. Use of these devices in such locations, can lead to criminal prosecution and severe penalties.



	Cat.	Qty 1+	Qty 2+	Qty 4+
Glasses Camera	QC-8022	\$199.00	\$178.95	\$169.00



MORE COVERT
CAMERAS ON PAGE 448

"SPY" WATCH WITH HIGH DEF CAMERA RECORDER

Not only a full functional, quality and stylish watch, it also has a built-in high definition video recorder. On the dial of the watch lies the camera lens that is almost invisible to the naked eye. It will record at 1280 x 960 video resolution and 3264 x 2448 still images into the 4GB memory that is built-in. It also has a built-in microphone hidden on one of the knobs. Unit has an internal lithium battery that charges via the USB cable provided. Although the watch looks like a divers watch, the unit is not waterproof.

- Watch bezel measures 42(Dia.) x 15(D)mm



	Cat.	Qty 1+	Qty 2+	Qty 4+
4GB Watch Camera	QC-8070	\$89.95	\$80.95	\$74.95

ACTION CAMERAS

WI-FI HIGH DEFINITION ACTION CAMERA

1080P HD WI-FI ACTION CAMERA WITH WATERPROOF CASE

A Wi-Fi enabled 1080p action camera that will sync with your Smartphone so you can use your phone to stop/start recording, review footage or images without unmounting your camera from your helmet, snowboard, or handlebars. Makes recording and setup so much easier and quicker. The ability to instantly review on a Smartphone interface means you can quickly delete unwanted footage straight away and redo it. When the action has finished you can save the videos or images directly to your phone through the free Symagix app. The advanced OV2710 image sensor is able to capture 1080p footage at 30fps and 720p at 60fps allowing some slow-mo playback if you're into video editing.

Symagix - Recommended free app for Android and iOS®

Package includes:

- Waterproof case
- Handlebar mount
- Suction cup mount
- Helmet mount

Features:

- Mini HDMI for connection to LCD screen
- Buttons: Power, video record, Wi-Fi button

NEW LOW PRICE



Specifications	QC-8021
Screen size	N/A (controlled with buttons or through the app)
Camera resolution	5.0MP CMOS OV2710
Camera lens	F3.1 f=2.9mm, angle 120 degrees
Resolution	
	1920 x 1080 (1080p at 30fps)
	1920 x 1080 (1080p at 25fps)
	1280 x 720 (720p at 60fps)
	1280 x 720 (720p at 50fps)
Submersible up to 30m with the waterproof case	
File format	H.264(8Mbps bit rate) / JPEG
Still image resolution	up to 5MP
Video with sound	Yes (built in microphone)
Built-in microphone	Yes
Storage	Internal DDR3 1GB, microSD SDHC card up to 32GB (Not included)
Video file size:	10 minutes per GB at 1080P resolution
IP Rating	IPX8 (Up to depth of 30m)
PC interface	USB2.0
Power source	3.7V 1000mAh Li-ion built-in
Power life	1080p (110 mins) / 1080p with Wi-Fi (60 mins)
Dimensions	61(W) x 38(H) x 25(D)mm



	Cat.	Qty 1+	Qty 4+
Wi-Fi Action Camera	QC-8021	\$169.00	\$151.95
Spare Battery Li-ion	QC-8025	\$14.95	\$13.95

ACTION CAMERA MOUNTS

A range of mounting accessories for our HD sports cameras. These mounts will allow you to capture the action from new angles for different scenarios. Mount on your chest for much better 'handle bar' view of mountain biking action, or mount to the tip of your surfboard. See our website for more details on each model.

SURFBOARD MOUNT FOR ACTION CAMERAS

KIDS BIKE MOUNT FOR ACTION CAMERAS 10-25MM

BIKE MOUNT FOR ACTION CAMERAS 17-32MM

SPORTS CAM POLE MOUNT BRACKET

HELMET MOUNT FOR ACTION CAMERAS

CHEST MOUNT HARNESS FOR ACTION CAMERAS

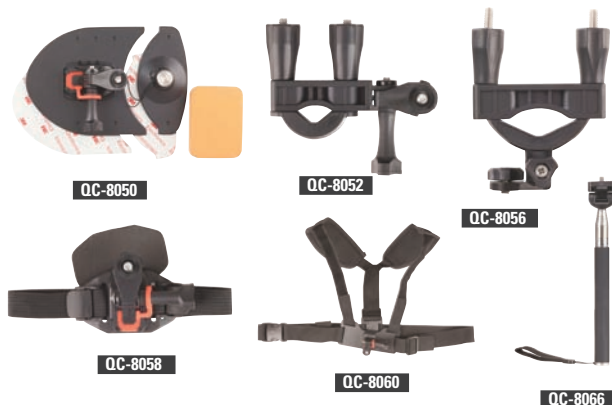
HEAD STRAP FOR ACTION CAMERAS

MONOPOLE MOUNT FOR ACTION CAMERAS WITH GOPRO® ADAPTOR



QC-8050
QC-8052
QC-8054
QC-8056
QC-8058
QC-8060
QC-8062
QC-8066

	Cat.	Qty 1+	Qty 4+	Qty 10+
Surfboard Mount	QC-8050	\$29.95	\$26.95	\$23.70
Kids Bike Mount 10-25mm	QC-8052	\$14.95	\$13.45	\$11.95
Bike Mount 17-32mm	QC-8054	\$16.95	\$14.95	\$13.35
Sports Cam Pole Mount 32-55mm	QC-8056	\$18.95	\$16.95	\$14.95
Helmet Mount	QC-8058	\$14.95	\$13.45	\$11.95
Chest Mount	QC-8060	\$24.95	\$22.50	\$19.95
Head Strap	QC-8062	\$14.95	\$13.45	\$11.95
Monopole Mount with Adaptor	QC-8066	\$29.95	\$26.95	\$23.70



SELFIE POLE WITH BLUETOOTH® CONTROL!

Just attach your Apple® or Android® Smartphone to this selfie pole and let the fun begin. Features Bluetooth® wireless technology to take photos and videos without the need to tap your phone. Simply pair the selfie pole with your phone and press the button on the grip. When the action is over, show off your artistry on Facebook®, Twitter®, Instagram® or YouTube®.

- Rechargeable battery
- Compatible with Apple® and Android® Smartphones
- Bluetooth® photo/video capture button
- Includes 2 brackets for 3.5-5.5" Smartphones

Specifications	
Running time	up to 10 hours
Charging time	1 hour
Supports	iOS® 4.0+, Android® 3.0+
Dimensions	Extends from 235 to 1015mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
	QC-8068	\$34.95	\$31.45	\$27.90

802.11AC HIGH SPEED WIRELESS NETWORKING

WIRELESS ADSL2+ MODEM ROUTERS

A high performance router that provides full ADSL2+ capability and superb reliability as a cost-effective networking solution for the home. These models allow up to 4 wireless SSIDs which would let you create wireless nodes with varying permission levels such as a guest network that has limited access. WPS setup is standard giving extremely quick setup for your Tablets or Smartphones. A broad set of customisable security features are at your disposal including a firewall and QoS to maintain reliable traffic flow through the network as well as MAC address filtering and much more. 4 x 10/100Mbps RJ-45 ports are featured and a USB socket (only on 300Mbps model YN-8342) for attaching a USB HDD or flash drive so files can be shared over the network with extreme ease. The intuitive user management interface provides a myriad of options to have your router humming to your needs.

Two models available

WIRELESS N150 ADSL2+ - YN-8340

WIRELESS N300 ADSL2+ WITH USB SHARING - YN-8342

General Features:

- Complies with ADSL2/2+ standards with downstream and upstream data rates up to 24Mbps and 1Mbps
- Wi-Fi 802.11b/g/n compatible
- 4 x 10/100Mbps RJ-45 Ethernet ports
- Features WEP & WPA2 encryption and a hardware WPS button
- Supports UPnP, IP/MAC filtering, DMZ and virtual server

Wireless Features:

- 802.11b/g/n compatibility
- Wireless security: 64-bit, 128-bit, WEP, AES, TKIP, WPA, WPA2
- Wireless Protected Setup

Security Features:

- Firewall
- MAC address filtering
- QoS
- Anti-DoS
- Anti-port scanning
- URL filtering

Network features:

- ADSL2+ Standard: Annex A/M
- DHCP server and DHCP relay
- Bridge uplink
- VLAN at WAN end
- NAT and NAT
- VLAN and port binding

Included accessories:

- RJ-45 Cable
- ADSL Splitter
- RJ-11 cable
- Power supply
- Spare antenna

Configuration Management:

- Web based interface
- Telnet and SSH
- Two tiered user management including admin & diagnostics user

System Specifications:

- Chipset: BCM6318+BCM43217+BCM6301
- DDR SDRAM: 32MB DDR
- Serial Flash: 4MB / 8MB

Note: YN-8340 is not available in New Zealand

	Cat.	Qty 1+	Qty 4+	Qty 10+
N150	YN-8340	\$69.95	\$62.95	\$55.95
N300 with USB Sharing	YN-8342	\$89.95	\$80.95	\$71.95

WIRELESS AC750 DUAL BAND ROUTER

Take advantage of the latest in wireless technology with this 3-in-1 802.11ac router which boasts Wi-Fi speeds of up to 733Mbps. This allows you to stream HD movies over Wi-Fi, transfer large files quicker using the 5GHz band or the option of 2.4GHz for general internet browsing. It can function as a router, access point or a Wi-Fi range extender and these modes can be switched over with one click. Features WPS for quick Wi-Fi connection on Smartphones, Tablets and laptops as well as Smart IQ setup which will get you up and running without needing to cycle through a myriad of technical settings. Multiple SSIDs can be operated (up to 4) enabling wireless hotspots with different access permissions, eg guest and admin. There is one RJ-45 10/100 WAN port for sharing the internet from a modem and 4 x 10/100 ports for wired devices on the network.

Specifications:

- 1 x 10/100Mbps RJ-45 WAN port
- 4 x 10/100Mbps RJ-45 LAN ports

Wireless Features:

- 802.11ac/b/g/n compatible
- Speeds up to 433Mbps on 5GHz band
- Speeds up to 300Mbps in 2.4GHz band
- Multiple SSIDs enables users to configure up to four separate SSIDs
- 2 x 2.4GHz 5dBi antennas and 1 x 5GHz 5dBi antenna

Network features:

- IGMP proxy and IGMP snooping
- DDNS and DHCP
- Port triggering
- Virtual server and DMZ hosting
- MAC/IP filter and URL blocking
- QoS for smart bandwidth management
- Static routing
- UPnP architecture
- VPN pass-through (IPSec/PPTP)

Security Features:

- 64/128-bit WEP encryption, WPA and WPA2 security
- QoS for critical operations
- SPI anti-DoS firewall

Included accessories:

- 5VDC power supply
- 1 x Cat 5 cable

Configuration management:

- Multi-language user interface
- Supports remote management
- System status and security log
- Firmware upgradeable
- Smart IQ Setup, no CD required
- Supports Smartphone, Tablet or laptop setup (iOS 4 or Android 4 and above are required for Smartphone or tablet setup).

System specifications:

Dimensions: 190(L) x 141(W) x 42(H)mm

NBN Ready



Easy Smartphone IQ setup

iPhone® not included

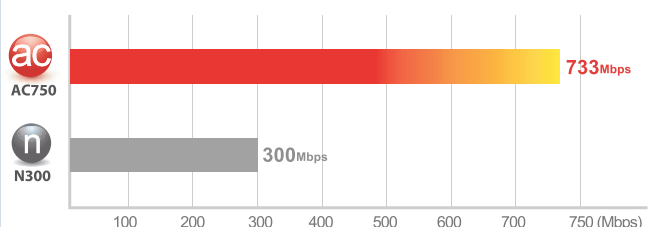
	Cat.	Qty 1+	Qty 4+	Qty 10+
AC750 Dual Band	YN-8329	\$119.00	\$106.95	\$94.95

TECH TALK!

SUPERCHARGE YOUR WI-FI WITH 802.11AC!

- More speed:** Up to 6 times faster, to stream multiple high quality videos simultaneously
- More capacity:** Up to 3 times the capacity, so that your Wi-Fi can handle more users, more devices, more high quality video streaming and larger downloads
- More coverage:** Better speeds and reliability, at greater distances from your Wi-Fi access point so you can stay connected in more places
- More battery life:** Transfers data faster, so your devices use less power and last longer between charges

Maximum Speed: Next Generation 802.11ac vs. 802.11n



802.11N HIGH SPEED WIRELESS NETWORKING (CONTINUED)

WIRELESS BROADBAND ROUTERS - 802.11N

Combines three essential networking tools into one. This intelligent router can operate as a Wi-Fi range extender, a Wi-Fi access point or a wired/wireless router. It fully supports the 802.11b/g/n standards and provides excellent wireless coverage with the 2 x high gain 3dBi antennas. A guest network mode can be enabled when using the router option which lets users access the internet but blocks them from your primary secured network. With WISP support you can share an internet connection from a wireless ISP access point and convert it to a wired or wireless network for multiple users in your home or office. Also features Wi-Fi Protected Setup (WPS) button to setup a secure connection in one click. If your device doesn't support WPS there's a simple iQ setup that can be completed in minutes by your Smartphone when connected to the Wi-Fi connection.

- 1 x RJ-45 Fast Ethernet WAN port
- 4 x RJ-45 Fast Ethernet LAN ports
- WEP, WPA & WPA2 encryption
- WAN protocol: PPPoE, static IP, dynamic IP, PPTP and L2TP
- Dimensions: 135(W) x 110(D) x 28(H)mm



Easy Smartphone IQ setup

iPhone® not included



Two models available:

WIRELESS N150 ROUTER
YN-8325**WIRELESS N300 ROUTER**
YN-8327

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
N150	YN-8325	\$44.95	\$40.45	\$35.90
N300	YN-8327	\$59.95	\$53.95	\$47.90

802.11N WIRELESS NETWORKING

N150 NANO USB 2.0 WIRELESS NETWORK ADAPTOR

They don't get much smaller than this. Excluding the USB plug, this wireless-N network adaptor measures in at an astounding 5mm wide. It's the ultimate in discrete networking and perfect for the PC, laptop, or netbook.

- USB 2.0
- Compatible with 802.11n/g/b networks
- Transfer rate up to 150Mbps
- Supports 64/128-bit WEP, WPA (TKIP with IEEE 802.1x), WPA2 (AES with IEEE 802.1x)
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS® 9.0-10.8, Linux
- Dimensions: 15(L) x 5(W) x 17(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8309	\$19.95	\$17.70	\$15.70

N300 MINI USB 2.0 WIRELESS NETWORK ADAPTOR

Add 802.11n wireless capability to your computer. Supports transfer speeds up to 300Mbps and is part of the 802.11n standard. A secure, sleek and convenient networking upgrade for the home or office.

- Security: 64/128bit WEP encryption
- WPA/WPA2 and WPA-PSK/WPA2-PSK encryption
- Wi-Fi Protected Setup (WPS)
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS® 9.0-10.8, Linux
- Dimensions: 58(L) x 26(W) x 9(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8307	\$24.95	\$22.35	\$19.70

N150 HIGH POWER USB 2.0 WIRELESS NETWORK ADAPTOR

Able to reach wireless networks from significant distances with enough signal strength to do what you need. The unit can connect to wireless networks up to 1km away.

- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS® 9.0-10.8, Linux
- Dimensions: 75(L) x 58(W) x 10(H)mm / Antenna: 172(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8306	\$44.95	\$40.45	\$35.90

TECH TALK!

WHAT DOES N150, N300, AC450, AC600 & AC750 MEAN?

	N150	N300	AC450	AC600	AC750
Wi-Fi Standards	802.11b/g/n	802.11b/g/n	802.11a/n/ac	802.11a/b/g/n/ac	802.11a/b/g/n/ac
Wi-Fi Speed (Mbps)	Up to 150	Up to 300	Up to 433	Up to 150 + 433	Up to 300 + 433
Frequency (GHz)	2.4	2.4	5	2.4 & 5 (Dual band)	2.4 & 5 (Dual band)

AC450 5GHZ NANO WIRELESS NETWORK ADAPTOR

A new generation Wi-Fi USB wireless adaptor to upgrade your existing laptop or desktop to take advantage of interference free 5GHz networks. Despite the size, this nano USB adaptor supports a higher data rate of up to 433Mbps when connecting with wireless 802.11ac devices. Ideal for bandwidth-intensive tasks like online gaming, video streaming etc.

NEW
2015

Specifications	YN-8311
USB	2.0
Frequency	5GHz
Data Rate	433Mbps
Wireless standard	802.11ac, 802.11a, 802.11n
Security	WEP64/128-bit, WPA, WPA2, 802.11x
Compatibility	Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.6+, Linux
Dimensions	18(D) x 14(W) x 7(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8311	\$34.95	\$31.45	\$27.90

AC600 DUAL BAND WIRELESS NETWORK ADAPTOR

Next generation extremely small USB 2.0 wireless network adaptor employing the new 802.11ac Wi-Fi standard which boasts higher speed of its predecessor. This adaptor features dual-band connectivity for maximum compatibility and performance in whatever network environment you're connected to. Connect to either a 2.4GHz network for basic internet applications or a 5GHz interference free network for HD streaming and gaming. The unit also features a Wi-Fi protected setup (WPS) button which allows you to set up and activate a secure wireless connection in a few seconds (Note: your wireless router will require a WPS button as well).



- 802.11ac 600
- 5GHz max speed - 433Mbps
- 2.4GHz max speed - 150Mbps
- Security: WEP 64/128-bit, WPA, WPA2
- Fully backward compatible with 802.11a/b/g/n standards
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.4+, Linux
- Dimensions: 40(H) x 16(W) x 6(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8328	\$39.95	\$35.90	\$31.90

802.11N WIRELESS NETWORKING (CONTINUED)

OUTDOOR WIRELESS NETWORK ADAPTOR

A uniquely designed USB network adaptor that has incorporated the network interface into the sizeable 9dBi dipole antenna. This design offers no signal loss and allows mounting of the waterproof antenna externally with the supplied bracket. There is a 5m USB lead attached to the antenna for connection to a laptop or desktop. An ideal solution for accessing Wi-Fi from caravans, boats, farms or rural areas where there is limited coverage.

Specifications	YN-8348
Wireless standard	802.11b/g/n
Bracket and screws included for mounting	
IP Rating	IPX5
Data Rate	150Mbps
Security	WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, TKIP/AES
Chipset	RALINK RT3070
USB 2.0 and 1.1 compliant	
Antenna	Fixed 9dBi dipole antenna
Range	Up to 1000m (line of sight)
Compatibility	Windows 8.1, 8, 7, Vista, XP, Mac OS® X 10.6+
Dimensions	460(L) x 27(W)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8348	\$54.95	\$49.45	\$43.90

BLUETOOTH® DONGLES

USB2.0 BLUETOOTH® V4.0 CLASS 2 DONGLE

Connect a wide variety of popular Bluetooth® devices to your PC, including modern Bluetooth® Low Energy devices.

- Bluetooth® V4.0 Class 2 (also Bluetooth® 2.1 + EDR)
- Transfer rate: 3Mbps
- Supports BLE
- RoHS compliant
- Plug n' Play
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000



BLUETOOTH® TRANSMITTER & RECEIVER SEE PAGE 383

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Class 2	XC-4956	\$19.95	\$17.70	\$15.70

WIRELESS NETWORKING EXTENDERS

UNIVERSAL WI-FI EXTENDER - N300

Eliminate Wi-Fi dead zones and extend the range of existing 802.11b/g/n networks with ease. After a one-off setup using a computer just plug the unit into an existing power point in your home and within seconds it will detect available Wi-Fi networks and establish connection. A signal strength LED is featured to help you locate the best position for optimal Wi-Fi coverage and a WPS (Wi-Fi protected setup) button for quick and easy configuration of the SSID and security key. Compact design for an unobtrusive installation.



Easy Smartphone IQ setup

- 1 x 10/100Mbps Ethernet LAN port
- Wi-Fi strength LED indicator
- WPS button
- 3 in 1 function: Range extender, access point & Wi-Fi bridge
- Includes RJ45 network lead for setup
- 802.11n/g - 2.4GHz 300Mbps
- Dimensions: 76(H) x 47(W) x 41(L)mm



iPhone® not included



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
300Mbps	YN-8360	\$69.95	\$62.95	\$55.95

UNIVERSAL CONCURRENT DUAL BAND WI-FI EXTENDER

Give every corner of your home or office a strong and reliable Wi-Fi connection with this universal dual band Wi-Fi extender. It will keep Smartphones, Tablets, PCs, media players and other peripherals working as they should without frustrating drops in wireless speed or performance. Dual-band functionality is built-in so it can still connect to older single band 2.4GHz routers as well as new 5GHz routers taking advantage of their speed and responsiveness. 5GHz means less interference from the crowded 2.4GHz spectrum, less lag and more stable Wi-Fi so you can stream HD video, music and games. Features Wi-Fi protected setup (WPS) allowing you to join an existing wireless network at the push of a button. For those with routers that lack WPS there is also a quick smartphone setup that can be done in minutes



- 64/128-bit WEP encryption and WPA-PSK, WPA2-PSK security
- WPS (Wi-Fi Protected Setup)
- User Access Control
- 802.11a/n/g

Specifications	YN-8364
Data rate	300Mbps
Frequency band	2.4GHz/5.0GHz
Dimensions	76(H) x 47(W) x 41(L)mm

Easy Smartphone IQ Setup

iPhone® not included



NEW LOW PRICE



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
300Mbps	YN-8364	\$79.95	\$71.95	\$63.95

AC750 WI-FI EXTENDER

Designed with dual-band speeds up to 433Mbps at 5GHz and 300Mbps at 2.4GHz frequency fully complied with IEEE802.11a/b/g/n/ac standards. You can connect this device to any existing wireless modem or router and extend the wireless signal, allowing more users enjoying high bandwidth wireless connection without cable burden and any interruption. It can support up to 433Mbps data rate which is 3 times faster and can enjoy truly high performance on wireless interface. It features a WPS button for user to easily build connection to router or network device by simply pressing WPS button of both devices. It also has an LED signal indicator.



NEW 2015

- 3 in 1 operation mode: Range Extender, Access Point and Bridge
- Support DHCP server to assign IP address automatically
- Provide 1 Ethernet port to support LAN configuration of AP/AP client
- Support 64/128-bit WEP, WPA, WPA2 and IEEE 802.1x wireless securities
- Support Wi-Fi Protected Setup (WPS 2.0) hardware button
- Support Web-based or smart phone configuration

Easy Smartphone IQ setup



iPhone® not included

Specifications	YN-8365
Main Chipset	Mediatek MT7620A + MT7610E
Ethernet Port	10/100M UTP Port x 1 (Auto MDI/MDI-X) for LAN
Frequency Band	2.4GHz, 5GHz
Data Rate: 2.4GHz	300Mbps, 5GHz: 433Mbps
Antenna	Internal Antenna x 3 (2.4G x2 2T2R, 5G x1 1T1R)
Dimensions	91(H) x 59(W) x 40(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
433Mbps	YN-8365	\$99.95	\$89.95	\$79.95

TECH TALK!

WIRELESS HIGHSPEED NETWORKING

Upgrade your wireless network to the latest high speed wireless technology & increase data throughput at the same time. These impressive devices use MIMO technology to significantly improve transmission range & minimise transmission errors. They are backward compatible to 802.11b & 802.11g systems & support Windows (98SE, ME, 200, XP, Vista, 7), Linux & Mac® systems.

- 802.11n, 802.11g, 802.11b, 802.11 protocols
- Data transfer rate up to 433Mbps
- Supports infrastructure and ad-hoc modes
- WPA/WPA2 - PSK

WI-FI STANDARDS						
Wi-Fi Standard Type	Protocol	Frequency (GHz)	Throughput (Typ-Mbps)	Data Rate (Max-Mbps)	Typical Range Indoors(m)	Typical Range Outdoors(m)
A	802.11a	5.15-5.875	23	54	30	100
B	802.11b	2.4-2.5	4	11	30	100
G	802.11g	2.4-2.5	19	54	35	110
G+	802.11g+	2.4-2.5	35	125	35	110
MIMO	802.11g	2.4-2.5	50	125	50	130
N	802.11n	2.4	74	300	70	160
N	802.11n	2.4/5 Dual Band	74	300	70	160
AC	802.11ac	5	220	433	30	60
AC	802.11ac	2.4/5 Dual Band	74 + 220	300 + 433	30	60

WIRELESS NETWORKING EXTENDERS (CONTINUED)

HIGH POWER WIRELESS OUTDOOR ROUTER/RANGE EXTENDER 802.11N

Need a long range, building to building wireless network? With a wireless power of 600mW this unit has excellent point to point range with the installed internal directional antenna. If omni directional transmission is required then you can connect an external antenna (sold separately) via the SMA connector at the base. Though designed for installation outside, please ensure that it is installed under an eave in position where it will never get wet. Features PoE (Power over Ethernet - which means you can send the power over the network cable to make it easier to get power to the router).

- LAN port 10/100 (featuring PoE)
- PoE power injection adapter included
- 12VDC 1A Power supply included
- Antenna Internal Directional 12dBi
- High data rate - up to 150Mbps
- Auto rate fallback - in case of obstacles or interference
- Supports WDS (Wireless Distribution System) repeater mode
- Supports AP Client mode
- Supports WEP, WPA, WPA2, AE2, 802.1x authentication
- Supports WPS (Wi-Fi Protected Setup) function
- Supports Web-based configuration
- Supports operation modes: Gateway, Bridge, Wireless ISP
- Supports Low Noise Amplifier (LNA)
- Supports VPN pass through PPPoE, PPTP, and L2TP connections
- Dimensions 225(H) x 77(W) x 59(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
150Mbps	YN-8330	\$119.00	\$106.95	\$94.95

NETWORK 802.11N CARD

802.11N PCI-E WIRELESS NETWORK CARD

For PC motherboards lacking in wifi this is a simple upgrade. Just slot it in a spare PCI-E port for 300Mbps wireless connectivity. The card itself is tiny with dual antennas for the best possible reception and transfer rates.

- Plug and play
- Complies with wireless 802.11b/g/n standards
- Wireless security: WEP 64/128, WPA, WPA2
- Compatibility: Windows 8.1, 8, 7, Vista, XP
- Dimensions: 65(L) x 43(W)mm (without antenna)



	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8326	\$39.95	\$35.90	\$31.90

1GBPS PCI-E NETWORK CARD

Upgrade your PC with this 1Gbps PCI-Express Network card. Features auto-negotiation so it will work flawlessly with 10/100Mbps or 10/100/1000Mbps networks. Automatic full duplex capability eliminates packet collisions by allowing data to flow in both directions simultaneously. Comes with a standard ATX bracket as well as a mini-ATX bracket for home theatre PCs or small servers.

- Compatible with 10/100/1000Mbps speed networks
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Linux
- Dimensions: 65(L) x 66(W)mm



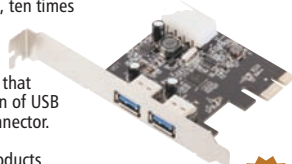
	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8073	\$21.95	\$19.70	\$17.35

INTERFACE CARDS

PCI-E USB3.0 INTERFACE CARD

Slot this PCI-Express card into your motherboard for 2 x USB 3.0 ports and reach speeds of up to 4.8Gbps, ten times faster than USB 2.0. Transfer times on hard drives and other storage platforms that support USB 3.0 will be significantly quicker. A cost effective upgrade for your desktop PC that will give compatibility for the next-generation of USB products. The card has one Molex power connector.

- Backward compatible with USB 2.0/1.1 products
- Compatibility: Windows 8.1, 8, 7, Vista, XP
- Dimensions: 85(L) x 66(W) x 15(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4143	\$34.95	\$31.45	\$27.90

ETHERNET OVER MAINS POWER

500MBPS POWER LINE ETHERNET ADAPTOR KIT

Sometimes the only effective way to share Internet throughout your home or office is through the use of Cat5 cables. Depending on the distance of the run, locations and the number of machines you need to connect, a seemingly simple setup can soon become complex, unsightly and a potential safety hazard. Not anymore. Plug this PLC adaptor into your AC power socket and connect it your modem by a Cat5 cable. To establish a connection on the other end do the same, instead connecting the adaptor to a client device such as your computer.

For safety the adaptor includes an overload protector (rated to 20A) and a safety shutter. It's energy efficient, consuming less than 5W under full load and under 1W on standby.

- Supported protocols:
 - LAN: 10/100 Base-TX, IEEE 802.3 az
 - PLC: HomePlugAV 1.1, IEEE 1901
- Data transfer rate:
 - PHY rate: up to 500Mbps
 - TCP rate: up to 95Mbps
 - UDP rate: up to 95Mbps
- Frequency band: 2 - 28MHz, 30 - 68MHz
- Security encryption: 128-bit AES with key management
- Ethernet port: 1-port 10/100 Ethernet
- Group/reset button: yes
- LED: power, Ethernet, PLC link
- Operating temperature: 0 - 40 °C
- Operating relative humidity: 10 - 85% non-condensing
- Power supply: 100 - 240VAC, 50/60Hz
- Power consumption:
 - Full load: < 2.4W
 - Standby mode: < 0.5W
- PLC modulation: OFDM (QAM 8/16/64/256/1024, 4096 QPSK, BPSK, ROBO)
- QoS (Quality of Service): Yes
- Max IGMP based IP TV streams: up to 16
- Transmission distance: AC wiring: up to 300m
- Max supported devices in a network group (active/total): 8/16
- Dimension: 67(L) x 56(W) x 31(H)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
500Mbps	YN-8352	\$109.00	\$89.95	\$79.95

AV500 NANO POWER LINE WIRELESS EXTENDER KIT

Extend your Internet connection around the house and eliminate Internet dead spots without messy wiring. This Power Line Wireless Extender comes as a kit along with a mini power adaptor which uses existing electrical wiring of your house to extend the Internet connection and provides a wireless hotspot at the receiving end. Easy to setup and doesn't require any additional cables or software.

Simply plug the wireless extender into a power outlet that powers the broadband router and then plug the adaptor into another power outlet up to 300m away, and connect it to a computer's Ethernet port to establish network connection.

A great way to extend the Internet to the workshop, bungalow, granny flat, etc, providing they are on the same electrical circuit (The same electrical phase). See website for full specifications.

- AV500Mbps
- N300 Wireless
- Range up to 300m via electrical wiring
- Plug-n-play setup
- Wi-Fi Protected Setup (WPS) button for quick and secure wireless connection
- Energy saving feature

Specifications	YN-8356
Effective Data Range	
TCP	Up to 95Mbps effective throughput
UDP	Up to 95Mbps effective throughput
Power line Standards	500Mbps
IEEE 802.11b/g/n, IEEE 1901, IEEE 802.3/IEEE 802.3u	
Security	
Support 64/128-bit WEP, 802.1x, WPA, and WPA2 for wireless security	
Multiple BSSID support	
Dimensions	82(L) x 53(W) x 41(D)mm



	Cat.	Qty 1+	Qty 4+	Qty 10+
AV 500Mbps	YN-8356	\$179.00	\$160.95	\$142.95

POWER OVER ETHERNET

POE PASSIVE KIT

PoE (Power Over Ethernet) is a technology that allows transfer of electrical power, along with data, over twisted pair cables. Finding a power supply is a common obstacle in LAN installations: PoE allows you to power wireless access points or other equipment via a Cat 5 cable without the need to have a separate power source available.

- You simply connect a plugpack of the required voltage via the 2.1mm DC connector, then tap it where you need it at the other end.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8410	\$19.95	\$17.70	\$15.70

5 PORT 65W POE SWITCH

This 5 Port 65W Power-over-Ethernet (PoE) switch can provide power to up to 4 devices on your network, such as IP cameras or Network equipment. It has 4 x PoE power supply ports and one UP-Link port with data and power transmission distance up to 100m.

- 5 10/100Mbps PoE switch
- Support IEEE802.3af standard
- 4 PoE power supply ports and 1 UP-Link port



Specifications	YN-8071
Data & power transmission distance	100m
Power supply	50V/1.25A
Earth port output	15.4W
Peak throughput	10/100Mbps
Dimensions	162(L) x 95(W) x 28(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
10/100Mbps	YN-8071	\$109.00	\$89.95	\$79.95

WI-FI BRIDGE

N600 DUAL BAND WI-FI BRIDGE WITH AUDIO STREAMING

A curiously shaped, classy solution for home entertainment. It is an ideal choice to upgrade your existing, slow and out-dated 54Mbps 11b/g devices to super-fast 300Mbps. The device comes with 2 LAN ports to provide Wi-Fi connectivity for two devices simultaneously and you can power from a spare USB port on your computer or via the supplied mains adaptor. Connect to the device through Wi-Fi with your Tablet, computer or Smartphone by using the built-in Wi-Fi Protected Setup (WPS) button and stream your favourite music to your audio system via the 3.5mm audio jack.

Supplied with RJ45 Ethernet Cable, mains adaptor, Access Key card and user manual CD.

- Upgrade to 5GHz for HD video streaming
- Support for two devices
- Wireless music streaming to your audio system
- Smart iQ Setup
- Status LED indicators
- Internal high power antenna
- WPS/Reset button



Easy Smartphone iQ setup
iPhone® not included



Specifications	YN-8368
Frequency Band	2.4GHz or 5GHz
Wireless Standards & Data Rates	IEEE 802.11a/b/g/n (up to 300Mbps)
Audio sample rate and resolution	DAC Signal-to-Noise Ratio (SNR) up to 100dB
Hardware Interface	2 x RJ-45 LAN ports (1 x Gigabit)
Security	64/128-bit WEP encryption and WPA-PSK, WPA2-PSK security, Wi-Fi Protected Setup (WPS)
System Requirements	Device with web browser for software configuration: Microsoft®, Internet Explorer®8.0, Google Chrome®, Firefox® or Safari®, iOS, Android® latest version and speaker with 3.5mm audio jack for music streaming
Antenna	2 x internal high - power 5dBi gain antenna
Power	5V DC 1.2A switching power adaptor
Dimensions	100(D) x 97(W) x 95(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
N600 Dual Band	YN-8368	\$94.95	\$85.50	\$75.95

NETWORKING SERVERS

ULTRABOOK / MACBOOK AIR® NETWORK ADAPTOR WITH 3 PORT HUB

For ultrabooks, Macbook Air® and Tablets where USB ports are sparse or RJ-45 network ports are non-existent. Simply connect a network cable to this device and you have a 10/100Mbps network adaptor. It also serves as a 3 port hub to connect peripherals such as a mouse, webcam, and keyboard. Small and lightweight.



- USB 2.0
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 96(L) x 24(W) x 16(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8407	\$24.95	\$22.35	\$19.70

USB 3.0 GIGABIT ETHERNET ADAPTOR

Provides a high performance 10/100/1000Mbps Ethernet connection for your laptop, desktop or Macbook®. Simple plug-and-play design makes use a breeze.



- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.2+
- Dimensions: 45(L) x 25(W) x 15(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8408	\$49.95	\$44.90	\$39.90

ETHERNET SWITCHES

8 PORT 10/100 N-WAY ETHERNET SWITCH

Unmanaged ethernet desktop switches to enhance network performance and efficiency. These units can be mains powered or powered directly from a USB port with the supplied USB Male to 2.1mm 5VDC adaptor making them great for small LANs and office desktops. Supports auto-negotiation so they will automatically detect whether connected devices are running at 10Mbps/100Mbps or 1000Mbps (for the gigabit model). They also feature cable length detection so devices which support this feature will have their cable length detected and power usage to that port will be adjusted accordingly. If a link is inactive the power will be dynamically adjusted to reduce power usage.

- Power: 5VDC
- Features 8 x RJ-45 ports
- Includes power supply & USB adaptor
- Dimensions: 137(L) x 76(W) x 25.5(H)mm

Two models available:

8 PORT 10/100MBPS SWITCH YN-8077

8 PORT 10/100/1000MBPS GIGABIT SWITCH YN-8078



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
10/100Mbps	YN-8077	\$24.95	\$22.35	\$19.70
10/100/1000Mbps	YN-8078	\$64.95	\$58.50	\$51.95

TECH TALK!

WHAT 802.11ac MEANS TO YOU

802.11ac is a hot new wireless technology that boasts faster and at longer ranges than 802.11n. Also widely known as "5G Wi-Fi" or "Gigabit Wi-Fi", it defines a faster and more reliable technology over 802.11n. It continues the use of MIMO (Multiple-Input Multiple-Output) and OFDM (Orthogonal Frequency Division Multiplexing), and boosts several key changes including improving data rate in excess of 3 Gbps depending on modulation, channel bandwidth, and MIMO configuration.

The primary changes are 80 and 160MHz wide channels in addition to the usual 40MHz channel. As the bandwidth increases, so do the number of OFDM subcarriers to a maximum of 512 at 160MHz

TECH TALK!

WHICH PROTOCOL IS RIGHT FOR YOU?

	Protocol	Max Speed (Mbps)	Web Surfing	Email	Streaming Music	File Storage & Sharing	VoIP	Online Gaming	Streaming Video (HD)
FAST	802.11n	150	✓	✓			✓		
FASTER	802.11n	300	✓	✓	✓	✓	✓		
FASTEST	802.11ac	733	✓	✓	✓	✓	✓	✓	✓
					2.4GHz		5GHz		

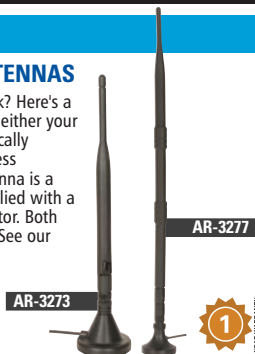
NETWORKING ANTENNAS

2.4GHZ WIRELESS NETWORKING ANTENNAS

Want to get a longer range in your wireless network? Here's a quick and inexpensive way to improve the range at either your base station or terminal. These antennas are specifically designed for 2.4GHz applications and 802.11 wireless networking is an ideal application. This rubber antenna is a dipole design and features a detachable base. Supplied with a 1.5 metre lead terminated to a reverse SMA connector. Both models supplied with a detachable magnetic base. See our adaptors section for conversions if needed.

Specifications	Both Models
Frequency Range	2.4GHz
Impedance	50 ohm
Polarisation	Vertical

Gain	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5dB	195mm	AR-3273	\$19.95	\$17.70	\$15.70
11dB	380mm	AR-3277	\$39.95	\$35.90	\$31.90



5/5.8GHZ 5DBI WIRELESS NETWORKING ANTENNA

Improve your wireless signal of your existing wireless AC (802.11ac) modem/router by attaching these 5GHz networking antennas. Supplied with a 1.5m lead terminated to a reverse SMA connector and a detachable magnetic base.

Specifications	AR-3286
Gain	5dBi
Directionality	Omni directional
Frequency Range	5.5 - 5.85GHz
Dimensions	220mm long

Gain	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5dBi	220mm	AR-3286	\$24.95	\$22.50	\$19.95



5/5.8GHZ 9DBI WIRELESS NETWORKING ANTENNA

Improve the wireless network signal of your existing wireless AC (802.11ac) modem/router using this 5GHz networking antenna. Supplied with a 1.5m lead terminated to a reverse SMA connector and a detachable magnetic base.

Specifications	AR-3288
Gain	9dBi
Directionality	Omni directional
Frequency Range	5.5 - 5.85GHz
Dimensions	390mm long

Gain	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
9dBi	390mm	AR-3288	\$39.95	\$35.90	\$31.90



3G/4G ANTENNAS - 800 TO 2100MHZ WITH FME CONNECTOR

Using 3G/4G wireless internet in certain areas may require the help of an antenna to boost the signal for a reliable flow of data. Both of these antennas feature a very strong magnetic base so you can fix it to the roof of your car or any other steel surface.

They both support frequency ranges of 850,1800 and 2100MHz. The cable is terminated with an FME connector.

- 5dBi 2m Cable Cat AR-3310
- 7dBi 3m Cable Cat AR-3312

Gain	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5dBi	290mm	AR-3310	\$49.95	\$44.90	\$39.90
7dBi	950mm	AR-3312	\$69.95	\$62.95	\$55.95



3G/4G ANTENNAS WITH LTE

These antennas with LTE (Long-Term Evolution) is an innovative solution for 3G/4G/LTE and 4G+ networks for enhancing signal reception and thereby experiencing more reliable data speeds to comply with "today's" requirements. Supporting LTE bands used in the frequency range of 700 to 2600MHz.

Both the antennas feature a sturdy magnetic base for stability.

Gain	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5dBi	290mm	AR-3322	\$49.95	\$44.90	\$39.90
7dBi	950mm	AR-3324	\$69.95	\$62.95	\$55.95



3G/4G 7DBI 850 - 2100MHZ FIBREGLASS ANTENNA

Built for maximum range and performance, the antenna is required if you need a reliable 3G/4G signal while on the road. It comes with a 5m cable with FME connector to suit a range of popular wireless devices and mobile car kits.

Specifications	AR-3311
Supports	GSM, CDMA, UMTS
Frequency	850 - 2100MHz
Gain	7dBi
Cable	5m RG58a/u
Suits	trucks, cars, 4WDs
Dimensions	747(L) x 18(Dia.)mm

Gain	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
7dBi	747mm	AR-3311	\$99.95	\$89.95	\$79.95

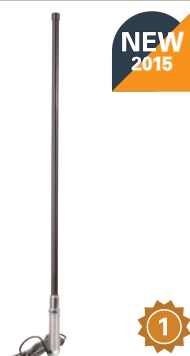


3G/4G 7DBI 700-2600MHZ FIBREGLASS ANTENNA WITH LTE

High performance antenna designed to improve the signal for your 3G or 4G LTE network signals. This high-gain permanent mount omnidirectional antenna features a 5m cable with SMA connector and stainless steel spring base.

Specifications	AR-3326
Supports	GSM, CDMA, UMTS
Frequency	700-2600MHz
Gain	7dBi
Cable	5m RG58a/u
Suits	Trucks, Cars, 4WDs
Dimensions	630(L) x 18(Dia.)mm

Gain	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
7dBi	630mm	AR-3326	\$119.00	\$106.95	\$94.95



SMA ADAPTORS

SMA ADAPTORS & LEADS

Boost the reception on your 3G/4G USB modem or mobile phone - great if you live in or travel to rural areas. The adaptors plug into the antenna socket on your USB modem to extend the signal range. For devices without an SMA connection use the AR-3330 induction adaptor.



- SMA TO INDUCTION 3G PLUG - 510MM
- SMA ADAPTOR TO HUAWEI E160/618 PLUG - 500MM
- SMA ADAPTOR TO SIERRA TS9 PLUG - 500MM
- SMA ADAPTOR TO TELSTRA 4G USB MODEM LEAD - 490MM
- LOW LOSS SMA EXTENSION LEAD - 5M

- CAT. AR-3330
- CAT. AR-3332
- CAT. AR-3334
- CAT. AR-3336
- CAT. WC-7824



	Cat.	Qty 1+	Qty 4+	Qty 10+
Induction 3G Plug	AR-3330	\$16.95	\$14.95	\$13.35
Huawei E160/618 Plug	AR-3332	\$16.95	\$14.95	\$13.35
Sierra TS9 Plug	AR-3334	\$16.95	\$14.95	\$13.35
Telstra 4G USB Modem Lead	AR-3336	\$16.95	\$14.95	\$13.35
Low Loss SMA Extension Lead	WC-7824	\$34.95	\$31.45	\$27.90

MONTHLY SPECIALS

Look out for our monthly promotions in store now!

WIRELESS HOTSPOT

WI-FI MULTI CARD & USB READER

This clever device creates a secure Wi-Fi hotspot so you can share and transfer files from your memory cards and USB storage devices wirelessly between your computers, Tablets, and Smartphones. It has an internal rechargeable battery so you can use it for up to 3 hours without power. If you connect a 3G USB dongle the device will become a 3G router allowing internet access for Wi-Fi devices. It has been tested on HDD up to 1TB. Supplied with USB to Micro-B USB power/charge cable.

- Simultaneously read/write - CF, SD, MS, M2, TF and microSD
- Simultaneously read/write to 3 USB devices
- Up to 20m Wi-Fi range
- Up to 8 users can access simultaneously
- 1000mAh rechargeable battery for up to 3 hours wireless use

Recommended apps for transferring files from your portable devices:

- iOS - WDPlayer
- Android - ES File Explorer
- Dimensions: 105mm x 65mm x 11mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8426	\$69.95	\$62.95	\$55.95

CONVERTERS & ADAPTORS

RS-232 DB9 TO USB CONVERTER

Connect a variety of legacy RS-232 devices to your modern computer with this simple adaptor.

- USB 1.1 compliant / Speed: Over 250kpbs
- Remote wake-up and power management
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS® 9.0+, Linux



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4927	\$27.95	\$24.95	\$22.35

USB TO DB9M RS-232 CONVERTER

This USB to 9 pin Serial (RS-232) converter allows a computer with a USB port to use any RS-232C serial device via the USB port. Suitable for digital cameras, modems, POS systems, ISDN terminal adaptors etc. The converter is powered by the USB port.

- Full compliance with USB specification 1.1(0)
- Over 1Mbps data transfer rate
- Support remote wake-up and power management
- Cable 1.5m long.
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 8.6+, Linux



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.5m	XC-4834	\$29.95	\$26.90	\$23.70

USB TO PARALLEL BI-DIRECTIONAL CABLE

Parallel printer ports have disappeared from most modern desk top computers and virtually all new notebook computers. This is not a problem if you have a USB printer, but many people still want to use their parallel printer or other parallel port devices such as ZIP drives or external CD-ROMs etc. This handy device replicates the old 25 pin printer socket and lets you use your legacy devices just like you would with a normal printer port. The USB interface provides up to 12Mbps data throughput, so printing is significantly faster compared with standard a parallel port (150kpbs) connection.

- USB Printer Class Specification 1.0 compliant
- IEEE-1284 1994 (Bi-directional parallel interface)
- Cable Length: 2 metres
- USB 1.1 Compliant A type male connector
- Compatibility: Windows 8.1, 8, 7, Vista, XP
- Plug & Play support



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	2m	XC-4847	\$39.95	\$35.90	\$31.90

RS-485/422 TO USB CONVERTER

Wire up an RS-485/422 device to the 4 socket terminal block to give your hardware USB connectivity. It features surge protection to guard against unpredictable voltage spikes. Suitable for industrial, military, marine, science and custom built applications. One USB A male to male cable is supplied.

- Includes a 610mm USB A Male to Male cable
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 55(L) x 42(W) x 24(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4132	\$79.95	\$71.95	\$63.95

SERIAL TO ETHERNET CONVERTER

With this converter, computers can connect to serial devices over Ethernet. It's an ideal solution for people who need to monitor or access RS-232 based equipment remotely or to share them over a network. There is one 9-pin male RS-232 plug, an RJ-45 socket and a terminal block to wire up RS-485 or RS-422 connections.



- Can be accessed remotely through a simple web interface.

Specifications	XC-4134
Supports	10/100M
Converts	RS-232, RS-485 and RS-422
Dimensions	88(L) x 68(W) x 27(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4134	\$129.00	\$115.95	\$102.95

DISPLAY CONVERTERS & ADAPTORS

CONVERTER LEAD MINI DVI PLUG TO HDMI SOCKET

Converter Lead Mini DVI Plug to HDMI Socket.



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	300mm	WQ-7423	\$24.95	\$22.35	\$19.70

MINI DISPLAYPORT TO VGA CONVERTER

Connect modern computers with a Mini DisplayPort to a conventional VGA display, such as CRT, LCD monitor or projector. Mini DisplayPort offers a unified, scalable, and cost effective interface for embedded and external display applications.

- Mini DisplayPort 1.1a compliant
- Supports up to 1080p, 1920 x 1200 video resolution



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WQ-7440	\$29.95	\$26.90	\$23.70

MINI DISPLAYPORT TO HDMI LEAD FOR MAC®

Connect your Mac® to a high definition display with this mini display HDMI lead.

- Designed for Mac® computers
- Plug and play



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WQ-7442	\$29.95	\$26.90	\$23.70

MINI DISPLAYPORT TO DVI VIDEO CABLE

Converts the Mini DisplayPort on a Mac® or other Apple® product to a standard DVI connector, which can connect to a standard monitor.



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WQ-7444	\$29.95	\$26.90	\$23.70

MINI DISPLAYPORT TO DISPLAYPORT/HDMI/DVI CONVERTER

Combine several mini DisplayPort converters into one with this useful unit. Easily converts to high definition displays that take HDMI, DVI or Display Port. Fully powered from the mini Display Port of your input device. A useful tool to use with your Macbook Air® or other Apple® device when wanting to output to a large screen TV.

- Output types: DisplayPort Female Type A 20pin, HDMI Female Type A, DVI Female (24+1)
- Supports DisplayPort 1.1a
- HDMI can support audio output for iMac® and MacBook Pro®
- HDMI/DVI output up to 1920 x 1080p @ 60Hz
- Display it auto detected
- DisplayPort 1.1a Dual-mode output with max resolution of 2560 x 1600
- Lead length: 180mm
- Unit Dimensions: 78(L) x 44(W) x 15(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WQ-7427	\$39.95	\$35.90	\$31.90

VIDEO CONVERTERS

COMPOSITE & S-VIDEO TO VGA VIDEO CONVERTER WITH VGA LOOP THROUGH

Connect a composite video or S-video source to a display monitor which only has VGA input. Ideal for connecting an old game console, VHS player, etc to your computer monitor or plasma TV. Features an on screen display where you can adjust resolution, picture mode, brightness, contrast, saturation and hue. Also has VGA loop through so you can have a computer and composite/S-video source connected to the same display.

Specifications:

- On screen display
- Supports PAL/NTSC
- Brightness, contrast, saturation and hue are adjustable
- Digital comb filter to prevent cross colouring
- Compatible resolutions:

800 x 600 @ 60Hz
800 x 600 @ 75Hz
1024 x 768 @ 60Hz
1280 x 1024 @ 60Hz
1280 x 720 @ 60Hz
1360 x 768 @ 60Hz
1440 x 900 @ 60Hz
1600 x 1200 @ 60Hz
1680 x 1050 @ 60Hz
1920 x 1080 @ 60Hz
1920 x 1200 @ 60Hz

- Dimensions: 95(L) x 54(W) x 26(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4906	\$49.95	\$44.90	\$39.90

DVI TO VGA, DIGITAL TO ANALOGUE SIGNAL CONVERTER

Still in use today are many older computer displays and projectors which accept analogue VGA inputs only. You've probably kept yours because it is in good working order, but if you have upgraded to the latest computer, chances are the video card inside only supports a digital DVI output, rendering the two incompatible. Not so with this converter. It converts the digital signal from your video card to an analogue signal suitable for use with your existing VGA display or projector.

- Converts digital DVI signal to analogue VGA signal
- Supports HDCP 1.2
- 165MHz/1.65Gbps per channel (6.75Gbps all channels) bandwidth for DVI input
- Supports analogue video output up to UXGA and 1080p with 10-bit DAC



Signal inputs/outputs	WQ-7445
Input video signal	0.5-1.0V p-p
Input DDC signal	5V p-p (TTL)
Input connection	DVI female (24+1)
Output connection	VGA
DVI video input format	480i/576i/480p/576p/720p/1080i/1080p
VGA video output format	480i/576i/480p/576p/720p/1080i/1080p
Vertical frequency range	50/60Hz
Input video amplifier bandwidth	1.65Gbps/165MHz
Weight	0.68kgs
Dimensions	88(L) x 68(W) x 25.5(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WQ-7445	\$59.95	\$53.95	\$47.90

VGA TO DVI, ANALOGUE TO DIGITAL SIGNAL CONVERTER

Current computer LED displays support digital DVI inputs only, however many small form factor PCs and older computers use video cards with analogue VGA output only. Use this converter to convert the analogue signal from your video card to a digital signal suitable for use with the latest LCD or LED display.

- Converts analogue VGA signal to digital DVI signal
- Supports a maximum display resolution of 1280 x 1024
- 165MHz/1.65Gbps per channel (6.75Gbps all channel) bandwidth
- 8-bit per channel (24-bit all channels) deep colour



Specifications	WQ-7446
Input video signal	0.5-1.0V p-p
Input video	VGA (female)
Output video	DVI (female 24+1)
VGA resolution	640x480 at 60/75Hz 800x600 at 60/75Hz 1024x768 at 60/75Hz 1280x720 at 60/75Hz 1280x768 at 60/75Hz 1280x960 at 60/75Hz 1280x1024 at 60/75Hz
Vertical frequency range	50/60Hz
Video amplifier bandwidth	1.65Gbps/165MHz
Dimensions	88(L) x 68(W) x 25.5(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	WQ-7446	\$59.95	\$53.95	\$47.90

VGA TO COMPOSITE & S-VIDEO CONVERTER

A compact and versatile device that lets you use your wide screen plasma or LCD screen as a computer monitor for gaming or presentation use. The unit accepts a standard VGA input and generates both composite video and S-Video signal simultaneously, so you can watch and record the video signal at the same time or even send it over a video distribution system. Great for watching DVDs, gaming, presentations, or just having a big screen on your computer. The unit powered from the computer's USB port and has an on-screen setup menu to adjust the video output signal and picture size. No software is required.



- Supports composite video and S-video output.
- Up to 1024 x 768 resolution
- Display on both PC and TV simultaneously
- Input and output leads included
- Powered from USB Port
- Size: 90(L) x 70(W) x 25(H)mm

Back view

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4871	\$69.95	\$62.95	\$55.95

USB TO DVI ADAPTOR

Enabling the addition of up to six extra displays, this adaptor allows you to add high-resolution graphics without having to add a graphics card - just connect it to any USB 2.0 port. Ideal for gamers, conference or AV rooms, POS systems or industrial applications.



- Video output with HDMI connector
- Supports DVI video output via HDMI-DVI adapter
- Easily connects additional monitors using a USB 2.0 cable
- Mirror or extend computer display workspace
- Resolution: up to 1,920 x 1,080 pixels at 32-bit colours
- No external power supply needed
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS X® 10.0+

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4879	\$79.95	\$71.95	\$63.95

KVM SWITCH

2 PORT VGA/USB KVM SWITCH WITH AUDIO

Control two computers with a single computer screen, keyboard, and mouse at a time. This 2 Port VGA/USB KVM (Keyboard-Video-Mouse) Switch is perfect for those of you who work with more than one computer simultaneously and don't want the clutter of two keyboards, mouse and screens. You can toggle between the two computers with either the QuickSwitch button, via the customisable hotkeys, or with the KVM Switcher software.



NEW 2015

- High video resolution support (up to VGA Resolution: 1920 x 1440 (Digital); 2048 x 1536 (Analogue))
- Features QuickSwitch button on a 1.5m wired remote control
- Supports wireless USB keyboard / mouse, USB flash drive and other USB devices
- Supports Microsoft IntelliMouse Optical, IntelliMouse Explorer, and Logitech USB mice
- Features plug-and-play and hot-plugging capability
- KVM switching via hotkey, QuickSwitch button, or KVM Switcher software
- Supports DOS, Windows® 3.x/95/98/98 SE/ME/XP/2000/NT/Vista®/7, Mac®, Netware®, Unix®, and Linux®



Specifications	YN-8081
PC Port Connector	HDB-15 x 2, USB A Type x 2, 3.5mm Speaker & Microphone plug x 2
Console Port Connector (Female)	HD-15F x 1, USB A Type x 2 3.5mm Speaker & Microphone Jack
PC Selection	Hotkey / QuickSwitch Button / KVM Switcher Software
KVM Cable	2 x 900mm combo cables
Dimensions	38(L) x 20(W) x 11(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8081	\$59.95	\$53.95	\$47.90

JAYCAR ENVIRO-BAGS

Free with any purchase over \$50.
Two sizes available!



VIDEO CONVERTERS (CONTINUED)

2 PORT VGA/AUDIO SPLITTER

Takes a computer's VGA and audio signal and sends it to two (2) analogue monitors and headphones/speakers via Cat5 cable. The same image is displayed on both monitors and identical audio streams are piped to each 3.5mm audio jack. The splitter provides fast, flexible solutions for test bench facilities, data centres or video broadcasting such as remote monitoring, presentations, education and stock quotes etc. Supports VGA, SVGA, XGA and Multi-Sync. Mains power adaptor included.



- Bandwidth up to 500MHz
- Resolution up to 1920 x 1200 and 1080p
- Transmit video/audio up to 15m
- Dimensions: 125(W) x 25(H) x 72(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2 Port Splitter	YN-8075	\$69.95	\$62.95	\$55.95

VGA & USB AUDIO TO HDMI AUDIO/VIDEO CONVERTER

Connect older PCs up to more modern displays such as LCD's and plasma screens. Just plug the VGA and USB cable into your PC and it will output a HDMI signal with audio/video. Doesn't get much simpler than that as the converter requires no external power.



- Fantastic for turning that old laptop or PC into a media centre for use on your big new flat screen.

Specifications	
VGA cable	300mm long
USB cable	1200mm
Supports	165MHz/1.65Gbps per channel
Powered	from USB port
Converter unit	80(L) x 55(W) x 11(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1639	\$79.95	\$71.95	\$63.95

USB 3.0 (VIDEO/AUDIO) TO 1080P HDMI

Add an additional monitor or projector to your computer. Uses USB 3.0 superspeed to ensure smooth and responsive 1080p streaming. A great solution if your current PC has limited display outputs but you require more screen landscape. It also carries audio through to the HDMI output so you can turn your PC into a home theatre PC without audio sync issues.



- Supports 16:9 full HD 1080p video streaming
- Resolutions up to 2048 x 1152 @ 32 bit colour
- HDMI ver 1.2 compatible
- Low power consumption
- Supports desktop mirror, extend mode, multi-screen mode, & rotation mode
- Add up to four USB 3.0 adaptors simultaneously
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS X® 10.0+
- Dimensions: 275mm x 35mm x 15mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4973	\$99.95	\$89.95	\$79.95

VGA & R/L AUDIO TO HDMI SCALER CONVERTER

Combines the audio and upscale the VGA output signal on a computer to 1280 x 720p for optimum viewing on a HDTV. Ideal for computers that only have a VGA output.



- HDMI resolution fixed to 1280x720p
- HDMI 165MHz/1.65Gbps per channel (6.75Gbps total)
- HDMI 8 bit per channel

Signal inputs/outputs	AC-1617	
Input signal	VGA, R/L audio	
Output video signal	HDMI 720p	
VGA resolutions	640 x 480 at 60/72/75/85Hz	800 x 600 at 60/72/75/85Hz
	1024 x 768 at 60/70/75/85Hz	1280 x 720 at 60Hz
	1280 x 768 at 60/70/75/85Hz	1280 x 800 at 60/70/75Hz
	1280 x 960 at 60Hz	1280 x 1024 at 60Hz
	1440 x 900 at 60/75/85Hz	1920 x 1080 at 60Hz
	1920 x 1200 at 60Hz	1920 x 1440 at 60Hz

Note: It is possible that several resolutions are limited on few displays

- Vertical frequency range: 50/60Hz
- Video amplifier bandwidth: 1.65Gbps/165MHz
- Dimensions: 88(L) x 68(W) x 25.5(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	AC-1617	\$99.95	\$89.95	\$79.95

DOCKING STATIONS

USB 2.0 EXTERNAL SATA HDD DOCKING STATION

Allows you to dock any 2.5" or 3.5" SATA hard drive for easy transfer of files. Just slide the hard drive into the dock and it will mount as an available volume on your Windows® or Mac® operating system. A great tool for those who regularly clone drives or need to easily swap or check the contents of SATA drives. Supports hard drive hot swapping.



- Up to 480Mbps transfer rate with USB 2.0
- Up to 3Gb/s transfer rate with eSATA
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS X® 10.0+, Linux
- Dimensions: 165(W) x 110(D) x 102(H)mm

Hard Drive not included



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4690	\$39.95	\$35.90	\$31.90

USB 3.0 SATA 2.5"/3.5" HDD DOCK

A 2.5"/3.5" SATA dock for USB 3.0 enabled desktop PCs and laptops. USB 3.0 boasts theoretical speeds of up to 4.8Gbps, that's ten times faster than its USB 2.0 predecessor. Such an exponential improvement makes buying USB 3.0 transfer devices such as docks and external drives a no-brainer. SATA docks are particularly useful for computer technicians, IT professionals and those of you who download a lot and need to swap between drives frequently. With USB 3.0 transferring gigabytes of files around will be significantly quicker so you can get back to what you love doing most, downloading more files.



- Backwards compatible with USB 2.0
- USB 3.0 cable included
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS® 9.0+, Linux
- Dimensions: 145(L) x 94(W) x 82(H)mm

Hard Drive not included



↑	Cat.	Qty 1+
	XC-4696	\$49.95

USB 3.0 CLOUDDOCK WITH WEBDAV/FTP/SAMBA/BITTORRENT

Much more than a simple hard drive dock this unit doubles as a NAS with remote login via the web. Just connect it to your router and access the devices IP address to begin setting up. The device can be run as a Samba server, webdav server, ftp server or even a media server. With webdav mode enabled you could use an android or iOS app to remotely organise files on your drive from anywhere. They can then be accessed directly using the ftp server functionality. The media server setting allows you to share a photo, music or video folder. Last but not least, you can also add torrents to download directly to the docked drive. Download queue priorities can be set, you can then be auto-mailed when a torrent is complete.



- Supports 3.5/2.5 inch SATA hard drives
- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS® 9.0+, Linux
- Dimensions: 134(L) x 114(W) x 55(H)mm

Hard Drive not included

Note: Apps are not included with the device. There are several free webdav apps on Google play store and apple iTunes. Search Webdav.

NEW LOW PRICE



↑	Cat.	Qty 1+
	XC-4691	\$59.95

USB 3.0 DUAL 2.5/3.5" SATA HDD DOCKING STATION

Hard drive docking stations provide PC users with the ability to quickly and easily backup valuable data, access old drives, clone, format and debug disk problems. They're a great tool to have around the home or office. This unit provides two SATA docking ports that can accommodate either two 3.5 or 2.5 inch SATA drives or one of each depending on your application. It is USB 3.0 ready so all your disk operations will perform up to ten times faster than on older USB 2.0 docks. High speeds and the convenience of dual docks means less time backing up.



- Compatibility: Windows 8.1, 8, 7, Vista, XP, Mac OS® 9.0+, Linux
- Dimensions: 130(W) x 61(H) x 103(D)mm



Hard Drive not included

↑	Cat.	Qty 1+
	XC-4697	\$69.95

EXTERNAL HDD ENCLOSURES

2.5" EXTERNAL HDD CASE - USB 2.0

Instantly add gigabytes of storage to your computer or move large amounts of data from one computer to another. This external hard drive case has a USB 2.0 interface and will accept a standard 2.5" hard drive or SSD. The precision case does away with the awkward ribbon cable and the hard drive easily connects straight onto the PCB mounted connector. When fitted with a hard drive, this unit makes an ideal backup device or could even be used as a portable digital image storage unit.



- Interface: USB 2.0
- HDD Size: up to 2TB Hard Drive
- Transfer Rate: up to 30Mbps
- Compatible with Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 9.0+, Linux
- Dimensions: 126(L) x 76(W) x 12(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4681	\$19.95	\$17.70	\$15.70

2.5" SATA HDD ENCLOSURE - USB 3.0

Take advantage of the massive speed increase of USB 3.0. Slot your 2.5" SATA HDD into this compact enclosure and when connected to a USB 3.0 port of a computer you will experience speeds up to 10 times faster than USB 2.0. Installation is easy, just slide the covers off and pop in the drive then secure everything with the supplied screws.



- Includes one 1.1m USB 3.0 Micro B - to Male A cable
- Locking screws included
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 77(W) x 113(L) x 14(D)mm



↑	Cat.	Qty 1+
	XC-4684	\$34.95

3.5" EXTERNAL HDD CASE - USB 2.0

Accommodates a 3.5" SATA drive up to 3TB in storage capacity. Lightweight aluminium case for increased portability.

- USB 2.0 transfer rate up to 480Mbps
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 183(D) x 117(W) x 31(H)mm



Front view



Back view



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4669	\$44.95	\$40.45	\$35.90

3.5" SATA HDD ENCLOSURE - USB 3.0

Backup your data faster and carry it in style with this slick, black external HDD enclosure. Wait less do more, a USB 3.0 connection transfers data between computer and device up to ten times faster than a USB 2.0 connection. SATA I/II/III support means you can take advantage of the latest HDDs on the market or make use of your old, disused SATA HDDs. Installation is easy, just two screws to remove the back panel and no cables inside. Supplied with a desk stand and power supply.



Front view



Back view



- Plug 'n' Play
- Hot swappable
- For 3.5" HDDs only (not included)
- Supports SATA I/II/III
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4667	\$49.95	\$44.90	\$39.90

HDD ADAPTORS

IDE TO SATA HDD UPGRADE PANEL



Clip this onto the end of an old 3.5" IDE hard drive and the drive can then be used in our SATA HDD docks or inside personal computers that lack IDE data and power connectors. A simple method for upgrading IDE drives.

- Dimensions: 105(W) x 25(H) x 62(D)mm
- Compatible with: Maxtor, Samsung, IBM, Hitachi, Seagate Hard drives



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4970	\$19.95	\$17.70	\$15.70

SATA TO USB 3.0 ADAPTOR

If you are a downloading enthusiast or an IT professional who has accumulated a number of hard drives over the years and want a simple way to access them temporarily this adaptor is the perfect tool. When used with most enclosures and adaptors, SATA hard drives and solid state drives are limited by the speed of USB 2.0. This new USB 3.0 adaptor will take full advantage of the max speed of SATA (3.0Gbps). Transfer files or clone drives in a fraction of the time. Please note your PC must have a USB 3.0 port to support these speeds. Combine with the XC-4149 3.5" HDD enclosure (sold separately) for an easy, convenient backup solution.



- Fully compliant with USB 3.0 specifications
- Backward compatible with USB 2.0
- Includes USB 3.0 cable and mains adaptor
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 71(L) x 21(W) x 13(H)mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4149	\$38.95	\$33.95	\$30.45

SATA/IDE TO USB 2.0 HARD DRIVE ADAPTOR



Perfect tool to backup, or transfer large amount of data from one drive to another. Manual hard drive replacement is often labourious and time consuming. This IDE / SATA to USB 2.0 adaptor makes the job whole lot easier and faster with this set of cables designed to connect your SATA or IDE drive external through a USB 2.0 adaptor. It supports 2.5", 3.5" SATA and IDE devices and operates with one IDE and one SATA HDD simultaneously.

Package includes:
1 x USB2.0 to IDE+SATA converter
1 x USB 2.0 cable
1 x 4Pin Power cable
1 x 12V/2A power adaptor

Features:

- USB version 2.0 compliant
- SATA II version 1.0a compliant
- USB Mass Storage Class Bulk- Only Transport Specification Compliant
- Dual-Head IDE Connector (40pin and 44pin) plus one SATA II connector
- HDD Support:
IDE 2.5" HDD IDE 3.5" HDD
SATA 2.5" HDD SATA 3.5" HDD
IDE 5.25" CD/DVD Drives
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- USB cable length: 800mm
- Power Adaptor cable length: 1.5m
- Dimensions: 85(L) x 65(W) x 20(D)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-4150	\$44.95	\$40.45	\$35.90

HARD DRIVE POWER CABLES

SERIAL ATA / SATA / ESATA POWER CABLES

A range of SATA and eSATA data/power cables for use with personal computers and external serial ATA devices.

4 PIN POWER SPLITTER CABLE

Standard 4 pin power splitter for PC

- 1 x HDD plug to 2 x HDD sockets

Cat. PL-0750



SERIAL ATA LEAD 7 PIN PLUG

Use this 7pin cable to transfer data between your Serial ATA hard drive and serial ATA interface, at rates up to 150Mbps. Thinner, smaller and more versatile than the Parallel ATA Standard.

Cat. PL-0978



7 PIN TO 7 PIN SATA

Colour: Red

Length: 1 metre

Cat. PL-0980



STRAIGHT TO RIGHT ANGLE SATA

Colour: Red

Length: 1 metre

Cat. PL-0981



HDD POWER TO 2 X SATA

Power two SATA devices from one 4-pin male Molex connector.

Length: 200mm

Cat. PL-0759



HDD POWER TO 1 X SATA

Power a SATA devices from a 4-pin male Molex connector.

Length: 200mm

Cat. PL-0758



↑	Cat.	Qty 1+	Qty 4+	Qty 10+	
	HDD power to 2 HDD Sockets	PL-0750	\$4.95	\$4.45	\$3.90
	SATA to SATA	PL-0978	\$5.95	\$5.25	\$4.75
	SATA to SATA	PL-0980	\$7.95	\$6.95	\$6.25
	SATA RA to SATA	PL-0981	\$7.95	\$6.95	\$6.25
	HDD power to 2 x SATA power	PL-0759	\$7.95	\$6.95	\$6.25
	HDD Power to SATA	PL-0758	\$5.95	\$5.25	\$4.75

VOLTAGE TESTER

USB VOLTAGE & CURRENT TESTER

Displays the voltage and current that your USB powered device uses. This device features an LCD panel to give you 3-digit display of the voltage or current used and can be used to measure the power consumption of smart phones, tablets and other USB devices. The device is quite easy to use and the result is just two steps away - plug-in and measure!

NEW 2015

Specifications	
Voltage Range	3-6V
Current Range	0-3A
Accuracy	± 10mA
Cable length	100mm
Dimensions	78(L) x 36(W) x 17(D)mm



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5074	\$24.95	\$22.35	\$19.70

NETWORK & CABLE TESTERS

2 IN 1 NETWORK CABLE TESTER & DIGITAL MULTIMETER

This innovative device is ideal for network installers or technicians and will allow the user to easily check cable integrity or measure AC & DC voltage, current, resistance, and continuity etc. without needing to carry two separate devices. The unit will check for cable continuity, open-circuits, short-circuits, and cross-connections etc. A remote terminator is included and enables the user to check network cables at a wall jack or patch panel. Supplied with loop back cable, LAN terminator, and multimeter leads.

LAN Tester Specifications:

- LAN tester checks faults
- Mis-wired conductors
- Manual or automatic testing

DMM Specifications:

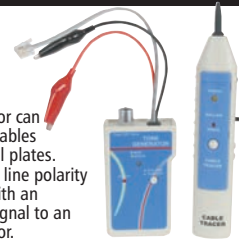
- 600 volt max input
- 20M ohm resistance
- Diode test
- Max hold
- 200mA AC/DC
- 3.5 digit
- Data hold



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5078	\$79.95	\$71.95	\$63.95

NETWORK CABLE TRACER

This tone generator is a highly practical network installation and troubleshooting tool which features a single/multi tone signal, test leads and a 4 conductor modular cable. The signal emitted by the tone generator can be easily traced by the companion probe, even when cables are in a bundle or hidden in punch down blocks or wall plates. The generator can also be used for checking telephone line polarity and status i.e. Ring/Busy/Idle. The probe is equipped with an insulated inductive pick up and will amplify the tone signal to an audible level. A LED is also included as a visual indicator. The probe has a volume control and either indicator can be switched off if desired.



Supplied in a protective zip up vinyl case.

- The tone generator measures 115(L) x 60(W) x 30(D)mm.
- The signal leads are 185mm long & terminated with alligator clips.
- The modular lead is 250mm long & terminated a 4 pin RJ12 plug.
- The probe is 205mm long and approximately 35 (H) x 35 (D)mm.
- Both units operate from a 9 volt batteries (sold separately). Use our Cat. SB-2423
- Supplied in a protective zip up vinyl case.



1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5083	\$99.95	\$89.95	\$79.95

MINI NETWORK CABLE TESTER WITH POE FINDER

Tests UTP/STP/Coaxial/Modular network cables by manually or automatically detecting missing or disordered wiring, and open or short circuits. It can quickly read the correct pin configuration of 10Base-T cable, 10Base-2 cable, RJ45/RJ11 modular cables, 258A, TIA-568A/568B and Token Ring cable etc. by comparing one transmitting end to the corresponding receiving end.

Supplied in a plastic case and with a PoE (Power-over-Ethernet) Finder that indicates if the network port or cable has power.

NEW 2015

Package Contents:

- 1 x Main Tester Unit with Terminator
- 1 x PoE Finder
- 2 x BNC Adaptor Cables
- 1 x BNC Male/Male Adaptor
- 3 x RJ45 to RJ11 Adaptors



Specifications:

- 9V battery required (use cat. SB-2423)
- Dimensions:
- Main unit: 80(L) x 55(W) x 22(D)mm
- Remote terminator: 80(L) x 25(W) x 23(D)mm
- PoE finder: 80(L) x 25(W) x 23(D)mm

1 YEAR WARRANTY

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5084	\$39.95	\$35.90	\$31.90

4P/6P/8P/10P MODULAR CRIMP TOOL WITH NETWORK/POE TESTER

A unique combination of a crimper tool and a cable tester in one unit. Designed for a wide range of telecom and network, security, and residential structured wiring, and professional applications.

NEW 2015

After crimping a modular connector, it enables you to quickly and easily test Ethernet twisted pair cable located on the handle of the tool for wiring continuity, opens, shorts, and mis-wires. With a single press on the TEST button, it will test the cable and gives the result of pin to pin configuration of the cables. The tester can also clip out of the housing and can be used as a general network tester.

The tool is steel framed with PVC handles and rust resistant black oxide finish. The device also includes a PoE (Power-over-Ethernet) finder to check if a voltage is present on a port or cable you are testing.

Supplied with a carry pouch that can directly worn on your belt.

- Testing for both UTP and STP cable
- Testing cable for continuity, opens, shorts, mis-wires
- Pin to pin indication
- Single and multi-wired cable crimping
- Integrated cable stripper and cutter
- Crimping tool and cable tester in one
- Detachable cable tester

Specifications	TH-1939
Tester unit	LED
Display method	LED flash indicator
Battery low	4.5VDC (Requires 3 x LR-44 type batteries)
Power supply	
Crimper unit	
Suitable for	10P, 8P, 6P, 4P
Dimensions	195(L) x 65(W) x 23(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1939	\$69.95	\$62.95	\$55.95

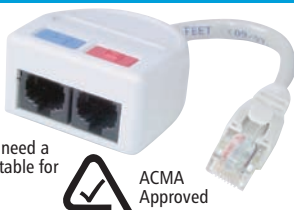
CAT5/6 & USB 3.0 LEADS

CAT5 SPLITTER

CAT5 UTP SPLITTER

Cat5 splitters enable two different devices to share the same Cat5 cable. They are usually used in pairs, one at each outlet.

Please note: you can't use this device to run two computers from one network port: you'll need a network switch for that. This product is unsuitable for gigabit networks.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YT-6090	\$16.95	\$14.95	\$13.35

CAT5/6 CABLES

CAT5E PATCH LEADS

RJ45 to RJ45.

- 350MHz stranded cable.



ACMA
Approved

**FOR FULL RANGE OF WALLPLATES
AND KEYSTONES SEE PAGE 196, 408**

↑	Colour	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	Blue	0.5m	YN-8200	\$3.25	\$2.90	\$2.60
	Blue	1.0m	YN-8201	\$3.95	\$3.45	\$3.15
	Red	1.0m	YN-8211	\$3.95	\$3.45	\$3.15
	Yellow	1.0m	YN-8221	\$3.95	\$3.45	\$3.15
	Green	1.0m	YN-8231	\$3.95	\$3.45	\$3.15
	Blue	2.0m	YN-8202	\$5.25	\$4.60	\$4.15
	Red	2.0m	YN-8212	\$5.25	\$4.60	\$4.15
	Yellow	2.0m	YN-8222	\$5.25	\$4.60	\$4.15
	Green	2.0m	YN-8232	\$5.25	\$4.60	\$4.15
	Blue	3.0m	YN-8203	\$6.95	\$6.25	\$5.50
	Blue	5.0m	YN-8204	\$8.95	\$7.95	\$6.95
	Blue	10.0m	YN-8205	\$14.95	\$13.35	\$11.70
	Blue	15.0m	YN-8206	\$21.95	\$19.70	\$17.35
	Blue	20.0m	YN-8207	\$24.95	\$22.35	\$19.70
	Blue	30.0m	YN-8208	\$37.95	\$33.95	\$30.45

CROSSOVER CABLES

Crossover cable eliminates the need for a hub when connecting two computers.

**NEW
LOW
PRICE**

↑	Colour	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	Black	2.0m	YN-8272	\$6.50	\$5.75	\$4.95
	Black	5.0m	YN-8274	\$10.50	\$9.25	\$8.25
	Black	10.0m	YN-8275	\$15.95	\$14.35	\$12.70

CAT 6A PATCH CABLES

Upgrade your home or office network to speeds up to 10Gbps. Will drastically reduce bottlenecks in file transfers, improve daily redundancy routines on networked drives, and lower crosstalk which is more prevalent in business environments.



ACMA
Approved

- Blue sheathed
- All models are ACMA approved



**1
YEAR WARRANTY**

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	YN-8292	\$3.95	\$3.50	\$3.15
1m	YN-8293	\$4.95	\$4.45	\$4.00
2m	YN-8294	\$6.95	\$6.25	\$5.50
3m	YN-8295	\$8.95	\$8.25	\$6.95
5m	YN-8296	\$12.95	\$11.35	\$10.35
10m	YN-8297	\$21.95	\$19.75	\$17.75
20m	YN-8298	\$32.95	\$29.45	\$26.50
30m	YN-8299	\$44.95	\$39.95	\$35.95

USB 3.0 LEADS & ADAPTORS

USB 3.0 LEADS

USB 3.0 MALE A TO MALE B LEAD

USB 3.0 offers data rates of up to 4.8Gbps - a quantum improvement over USB 2.0.



USB 3.0 MALE A TO MICRO B LEAD - 1.8M

USB 3.0 Male A to Micro B Lead - 1.8m



USB 3.0 MALE A TO MALE A LEAD



POWERED USB 3.0 EXTENSION LEAD 5M

Suitable for high speed USB 3.0 applications. USB A plug to socket, 5m.



↑	Length	Cat.	Qty 1+	Qty 4+	Qty 10+
	1.8m	WC-7772	\$14.95	\$13.35	\$11.70
		WC-7774	\$14.95	\$13.45	\$11.95
	1.8m	WC-7770	\$14.95	\$13.35	\$11.70
	5m	XC-4126	\$34.95	\$31.45	\$27.90

USB 3.0 ADAPTORS

PLUG B TO SOCKET A ADAPTOR

Cat PA-0930

MICRO B PLUG TO SOCKET A ADAPTOR

Cat PA-0931

SOCKET A TO A GENDER CHANGER

Cat PA-0932

MICRO B PLUG TO SOCKET B ADAPTOR

Cat PA-0933



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Plug B to Socket A	PA-0930	\$9.95	\$8.75	\$7.75
Micro Plug B to Socket A	PA-0931	\$9.95	\$8.75	\$7.75
Socket A to Socket A	PA-0932	\$9.95	\$8.75	\$7.75
Micro Plug B to Socket B	PA-0933	\$9.95	\$8.75	\$7.75

MONTHLY SPECIALS

Look out for our monthly promotions in store now!

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HP-1218



CABLE TIDY PRODUCTS

P218

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\$9.95

HP-1228



DESK GROMMET

P216

FROM

\$4.95

HP-1210



CABLE TIES

P218

FROM

\$5.95

YN-8016



WALLPLATES

P512

USB 2.0 LEADS & ADAPTORS

HIGH QUALITY USB 2.0 LEADS

High quality USB 2.0 leads for your PC peripherals, professional audio or camera equipment. Superior shielding protects against potential electromagnetic interferences and ensures data continuity. 24K Gold plated connectors.

USB A TO USB-MINI B MALE

Cat WC-7792



USB A TO USB MICRO B MALE

Cat WC-7796



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7792	\$14.95	\$13.35	\$11.70
2.0m	WC-7796	\$14.95	\$13.35	\$11.70

RETRACTABLE USB LEADS

Full length cables become easily tangled and damaged inside bags as we carry them with us. Our range of high quality and durable retractable leads extends to your desired length as required and retracts easily after you're done. Convenient for travel, it's easy to pack up and stores neatly.



USB A PLUG TO USB A SOCKET WHITE

WC-7734

USB A PLUG TO USB A PLUG

WC-7735

USB A PLUG TO USB MICRO B SOCKET WHITE

WC-7736

USB A PLUG TO USB MINI B SOCKET WHITE

WC-7737

Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7734	\$8.95	\$7.95	\$6.95
1.0m	WC-7735	\$8.95	\$7.95	\$6.95
1.0m	WC-7736	\$8.95	\$7.95	\$6.95
1.0m	WC-7737	\$8.95	\$7.95	\$6.95

ACTIVE USB 2.0 EXTENSION LEADS

Extend your USB devices. A built-in extender allows you to put data over longer distances. All use USB timing and electrical specifications that eliminate signal errors you may get in passive cables. USB 2.0 or 3.0, male to female and cables can be joined up to 25 metres.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
5m	XC-4839	\$24.95	\$22.35	\$19.70
10m	XC-4120	\$39.95	\$35.90	\$31.90
20m	XC-4124	\$49.95	\$44.90	\$39.90

USB RJ45 EXTENSION ADAPTOR

Connect any USB device to your computer from up to 50 metres away via a standard Cat 5 network cable. Now you can have your printer, webcam, keyboard, mouse or any other USB device exactly where you want it without having to move your computer around.

- PC and Mac® compatible
- Requires standard Cat5e cables
- Supports USB 1.1
- Transmitter & Receiver included

Cat	Qty 1+	Qty 4+	Qty 10+
XC-4884	\$29.95	\$26.90	\$23.70

SMARTPHONE / CAMERA LEADS

USB 2.0 OTG FEMALE A PLUG TO RIGHT-ANGLE MICRO MALE B PLUG

Connect a USB peripheral to a USB OTG compliant mobile/portable electronic device, such as your Smartphone.

- Length: 150mm



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7725	\$4.95	\$4.45	\$3.90

TECH TALK!

USB OTG (On-The-Go) is a specification which enables users to connect a standard USB input device, such as a computer mouse, keyboard, and sometimes a USB thumb drive to USB devices such as Smartphones.

USB A SOCKET TO RIGHT-ANGLE SAMSUNG® OTG ADAPTOR

Allows you to connect a USB peripheral such as a USB flash drive or USB hub to your Samsung® Galaxy Tablet.

- Length: 210mm



Cat.	Qty 1+	Qty 4+	Qty 10+
WC-7747	\$4.95	\$4.45	\$4.00

USB A MALE TO B MINI CAMERA MALE

Suits many digital cameras such as Kodak.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7722	\$9.95	\$8.75	\$7.75

USB A TO USB MICRO B LEAD

Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7723	\$5.95	\$5.25	\$4.75
1.8m	WC-7724	\$9.95	\$8.75	\$7.75

USB A TO USB MICRO B LEAD 3.0M

USB A to USB Micro B Lead
Length: 3.0m



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
3.0m	WC-7739	\$14.95	\$13.45	\$11.95

USB 2.0/480 PLUG A TO 5 PIN MINI-B

Use this to connect your PC to a digital camera or camcorder. USB 2.0 compliant. A size male to B size mini male



Suits Sony PSP®

Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7709	\$5.95	\$5.25	\$4.75
1.8m	WC-7710	\$9.95	\$8.75	\$7.75

USB 2.0 A TO B

- USB 4 Pin (A) Male to USB 4 Pin (B) Male
- Conforms to USB 2.0 standard - 480Mbps



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7705	\$5.95	\$5.25	\$4.75
1.8m	WC-7700	\$9.95	\$8.75	\$7.75
3.0m	WC-7701	\$11.95	\$10.70	\$9.50
5.0m	WC-7706	\$14.95	\$13.35	\$11.70

USB 2.0 A TO A EXTENSION LEAD

- USB 4 Pin (A) Male to USB 4 Pin (A) Female
- Conforms to USB 2.0 standard - 480Mbps



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7707	\$5.95	\$5.25	\$4.75
1.8m	WC-7702	\$9.95	\$8.75	\$7.75
3.0m	WC-7703	\$11.95	\$10.70	\$9.50

USB 2.0 A TO A

- USB 4 Pin (A) Male to USB 4 Pin (A) Male
- Conforms to USB 2.0 standard - 480Mbps



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7708	\$5.95	\$5.25	\$4.75
1.8m	WC-7704	\$9.95	\$8.75	\$7.75

BNC TERMINATOR

BNC TERMINATOR PLUG

- To terminate BNC sockets.
- Built-in 50Ω resistor.



Cat.	Qty 1+	Qty 10+	Qty 50+
PP-0655	\$4.95	\$4.45	\$3.90

DISCOUNT TRADE CARD



If you regularly purchase electrical or electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card which entitles you to substantial discounts on most Jaycar products. Discounts range from 5% to 30% depending on the type and quantity of product purchased. Excludes Kits & Books.

*ABN will be required - see our website or Store Manager for further details.

DATA & DISPLAY CABLES

DVI VIDEO CABLES

DVI TO DVI VIDEO CABLE

- Can be used for DVI-A or DVI-D
- Male to Male
- 24 pin
- 2m



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7590	\$29.95	\$26.90	\$23.70

DVI-A TO VGA VIDEO CABLE

- DVI to 15pin HD VGA
- 2m



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7594	\$24.95	\$22.35	\$19.70

LAPLINK CABLES

RS-232 SERIAL LAPLINK CABLE

NEW LOW PRICE



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7514	\$11.95	\$10.70	\$9.50

FILE TRANSFER CABLES

HIGH SPEED USB FILE TRANSFER CABLE

Sharing files between computers can be tedious unless they're networked together. Not any more - simply plug into a USB port on both PCs, a file-sharing window opens automatically on both machines showing the host and the remote computer. Drag and drop between them as easily as from one folder to another. No drivers, software or plug-ins to install.

- No file size limitations
- Transfer rate of 16MB/second
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000
- 1.8m long



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	XC-4942	\$24.95	\$22.35	\$19.70

SERIAL CABLES

DB9 MALE

TO DB9 FEMALE EXTENSION CABLE
All pins wired straight through.



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7534	\$9.95	\$8.75	\$7.75

DB9 FEMALE TO DB9 FEMALE NULL MODEM



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7511	\$6.95	\$6.25	\$5.50
1.8m	WC-7513	\$11.95	\$10.70	\$9.50

DB9 MALE TO DB9 MALE



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7535	\$9.95	\$8.75	\$7.75

RS-232 EXTENSION CABLE

DB25 Male to DB25 Female



NEW LOW PRICE

Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7508	\$13.95	\$12.35	\$10.95
3.0m	WC-7510	\$15.95	\$14.35	\$12.70

SERIAL MODEM CABLE

DB25 Male to DB9 Female



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7516	\$11.95	\$10.70	\$9.50

MONITOR CABLES

VGA MONITOR EXTENSION

DB15HD male to DB15HD female



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7500	\$11.95	\$10.70	\$9.50

VGA MONITOR CONNECTING CABLE

DB15HD Male to DB15HD Male



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7583	\$6.95	\$6.25	\$5.50
1.8m	WC-7582	\$11.95	\$10.70	\$9.50

XVGA MONITOR CONNECTING CABLES

- DB15HD male to DB15HD male
- Ferrite suppression on both ends
- Superior electrical screening



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7585	\$8.95	\$7.95	\$6.95
2.0m	WC-7586	\$18.95	\$16.95	\$14.95
5.0m	WC-7588	\$39.95	\$35.90	\$31.90
10.0m	WQ-7258	\$49.95	\$44.90	\$39.90
15.0m	WQ-7257	\$69.95	\$62.95	\$55.95

PRINTER CABLE

D25 TO CENTRONICS CONNECTOR - 1.8M



Length	Cat.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7522	\$14.95	\$13.35	\$11.70

LET'S FIND EVERYTHING YOU NEED!

FROM \$59.95
YN-8081



KVM SWITCH

P500

FROM \$9.95
HP-1228



DESK GROMMET

P216

FROM \$14.95
WH-5654



CABLE WRAP

P215

FROM \$49.95
CW-2831



MONITOR BRACKET

P490

GENDER CHANGERS

DVI-A PLUG TO VGA SOCKET

For connecting DVI-A or DVI-I video cards with VGA monitors.

- Note: Will not display the digital video signal from a DVI-D output, even though the plug physically fits.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-0897	\$12.95	\$11.35	\$10.35

DB9

All pins wired straight through.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Male/Male PA-0900	\$5.95	\$5.25	\$4.75
	Female/Female PA-0901	\$5.95	\$5.25	\$4.75

VGA PLUG TO SOCKET - 90°

VGA plug to socket right angle adaptor.

- Available with the socket angles up or down



PA-0898

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Angled Up PA-0898	\$8.95	\$7.95	\$6.95
	Angled Down PA-0899	\$8.95	\$7.95	\$6.95

RIGHT ANGLE MALE TO FEMALE ADAPTOR

DB9 Male to DB9 Female
Cat PA-0908



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	DB9 PA-0908	\$5.95	\$5.25	\$4.75

DB15 HIGH DENSITY

All pins wired straight through.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Male/Male PA-0875	\$6.95	\$6.25	\$5.50
	Female/Female PA-0876	\$6.95	\$6.25	\$5.50

DB25/DB9



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	DB25F/DB9M PA-0882	\$5.95	\$5.25	\$4.75

USB ADAPTORS

"A" FEMALE TO "A" FEMALE



PA-0921

RIGHT ANGLE "A" MALE TO "A" FEMALE

NEW LOW PRICE



PA-0926

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Skt to skt PA-0921	\$7.95	\$6.95	\$6.25
↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	Angle Up PA-0926	\$5.95	\$5.25	\$4.75

"A" MALE TO PS/2 FEMALE



PA-0915

"A" FEMALE TO PS/2 MALE

Colour may vary.



PA-0917

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	USB Male PA-0915	\$7.95	\$6.95	\$6.25
	USB Female PA-0917	\$7.95	\$6.95	\$6.25

CONFIGURABLE RJ45 ADAPTORS

DB25 MALE TO RJ45 8 X 8 SOCKET

- Unwired



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	DB25 Male PA-0904	\$7.95	\$6.95	\$6.25

DB25 FEMALE TO RJ45 8 X 8 SOCKET

- Unwired



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	DB25 Female PA-0905	\$7.95	\$6.95	\$6.25

DB9 SOCKET TO RJ45 Socket Adaptor.

- Unwired



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-0906	\$5.95	\$5.25	\$4.75

VIDEO ADAPTOR

DIGITAL VIDEO INTERFACE

Female to female

- Compatible with DVI-I single dual link, DVI-D single/dual link & DVI-A male
- All pins wired straight through



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	PA-0896	\$14.95	\$13.35	\$11.70

PRODUCT DATA

We now have so much data and fact sheets we cannot fit it all here! Check our website for over 3,500 pages of data!

PUNCH DOWN TOOLS

CAT5 PUNCH-DOWN TOOL / STRIPPER

LOW-COST. This versatile little tool will strip wire up to 5 to 6.2mm diameter, and doubles as a punch-down tool for 110/88-type terminals, with blade. Made from poly-resin plastic, with steel cutters this lightweight tool could easily fit in the pocket or tool kit.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1738	\$8.95	\$7.95	\$6.95

BLADE FOR CAT5 PUNCH TOOLS



This blade suits our punch tool - TH-1740. Made from hardened SNCM-21, its blades are both changeable and reversible, and can be changed by hand, no screwdriver necessary. Blade retaining pressure with in 4-6 kg. One end of each blade has a cutter for that extra-neat termination, the other end is plain for those "linked" blocks.

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	110 Krone TH-1743	\$17.95	\$15.95	\$14.35



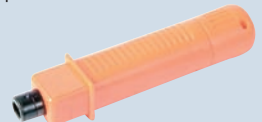
SEE CAT5E CABLE 30M PACK ON PAGE 210.



CAT5 PUNCH-DOWN TOOL - ADJUSTABLE

Has the same functions as the tool above, but has extra features to achieve the perfect "punch" for different wire sizes. It has a turnable body, adjustable impact pressure and a storage compartment within the handle for holding a spare blade. Frame made of polyacetal resin with orange fibreglass handle. Supplied with 88 blade.

- Spare blades see TH-1743.
- Impact pressure: Low: 10 +/- 2kg (standard wire)
High: 15 +/- 2kg (larger wire)
- Length of tool: 152mm.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1740	\$22.95	\$20.35	\$18.35

MEDIA - SD CARDS

MICROSD MEMORY CARDS WITH ADAPTOR

This microSD card is fully compliant with SD spec V1.1 and offer high write speed, lower power consumption, and superior performance. Supplied with a standard SD adaptor so you can use them in a standard card slot or reader.

- Class 4 unless stated
- Weight: 2g
- Call for latest pricing.
- Size: 15(L) x 11(W) x 1(H)mm



Contact us for latest pricing

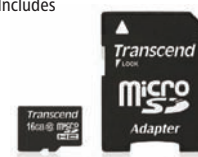


↑	Cat.	Qty 1+	Qty 4+	Qty 10+
2GB	XC-4998	\$8.95	\$7.95	\$6.95

CLASS 10 MICROSDHC CARD WITH SD ADAPTOR

Blazing fast Class 10 microSDHC cards with guaranteed 10MB/s read and write speeds. Ideal for full HD video recording. Includes SD card adaptor.

- Speed: Class 10 (UHS - 1)
- Includes SD adaptor for normal SD card slots



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
8GB	Class 10 XC-4983	\$19.95	\$17.70	\$15.70
16GB	Class 10 (UHS-1) XC-4989	\$29.95	\$26.90	\$23.70
32GB	Class 10 (UHS-1) XC-4992	\$49.95	\$44.90	\$39.90
64GB	NEW Class 10 (UHS-1) XC-4993	\$99.95	\$89.95	\$79.95

TECH TALK!

SPEED CLASS RATING

Speed class ratings of miniSD, microSD, SD & SDHC cards indicates the minimum performance to record video.

Class	Min. Performance	Suitable For
Class 2	2MB/sec	SD video recording
Class 4	4MB/sec	HD video recording
Class 6	6MB/sec	Up to HD video recording
Class 10	10MB/sec	Full HD or consecutive HD still capture

MEDIA - FLASH DRIVES

OTG USB FLASH DRIVES

USB Flash Drive features OTG (On-the-Go) to transfer data from your laptop or PC to your Android® device and vice versa. Extremely lightweight, and feature a USB connector on one end and a micro USB connector on the opposite end.

- Dimensions: 28.1(L) x 12.25(W) x 4.5(D)mm



Smartphone not included

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
16GB	XC-5622	\$24.95	\$22.50	\$19.95
32GB	XC-5624	\$39.95	\$35.90	\$31.90

TOSHIBA USB FLASH DRIVES

High speed USB 2.0 Toshiba flash drives for conveniently backing up data and quickly transferring files. They feature secure data protection and high reliability.

- Plug and Play
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 51(L) x 21(W) x 8(H)mm



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
8GB	XC-5616	\$9.95	\$8.75	\$7.75
16GB	XC-5617	\$21.95	\$19.70	\$17.35
32GB	XC-5618	\$36.95	\$31.45	\$27.90
64GB	NEW XC-5619	\$69.95	\$62.95	\$55.95

USB FLASH DRIVE WITH LIGHTNING™ CONNECTOR

Using this device you can expand the storage of your existing iPhone® or iPad®. It allows you to store, organise, and transport any type of files - just drag-and-drop the files right from your computer. With the candid design it works with all iPhone®/iPad® with Lightning™ connectors. Supplied with a 4GB microSD card and expandable up to 64GB.

- 4GB microSD card included (expandable up to 64GB)
- Dimensions: 65(L) x 27(W) x 7(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-5628	\$69.95	\$62.95	\$55.95

8GB USB PEN

A stylish metal ballpoint pen with a 8GB 2.0 USB flash drive built-in. Simply pull the pen in half to reveal the USB plug.

- Capacity: 8GB
- Overall length: 135mm

↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	XC-5640	\$19.95	\$17.95	\$15.70

SPECIAL NOTE RE MEDIA PRICES

When the ink dries at the catalogue printers, the prices are set for the life of the catalogue - 12 months. The price of media (ie. SD cards, flash drives, DVD etc) rarely stays fixed for more than a few months. If you think some of the prices shown on this page and page 305 are a bit high, don't be dismayed. The prices have probably changed - downwards! Check with your local store or Techstore for the latest price.

MEDIA - DVDS

VERBATIM DVD 8.5GB DUAL LAYER 8X

Verbatim DataLifePlus (AZO)

- 8.5 Gigabytes of storage capacity on a single sided disc.
- No need to flip the disc
- Advanced AZO recording dye optimizes read/write performance
- Largest compatible DVD back-up & data archiving format
- Record 4 hours of DVD quality television and video (16 hours VHS quality)
- Limited Lifetime Guarantee



Contact us for latest pricing

↑	Cat.	Qty 1+
Single DVD + R	XC-4744	\$3.25
Single DVD-R	XC-4743	\$3.25

VERBATIM DVD-RW 4.7GB SINGLE 4X

Verbatim DataLifePlus (SERL) DVD-RW

- 4.7GB Jewel Case Singles 4x
- 4x DVD-RW recording speed (version 1.2)
- Re-recordable up to 1,000 times
- Super Eutectic Recording Layer optimises read/write performance and durability
- Superior Archival Life
- Limited Lifetime Guarantee



Contact us for latest pricing

↑	Cat.	Qty 1+
Single	XC-4732	\$1.95

VERBATIM DVD+RW 4.7GB SINGLE 4X

Verbatim DataLifePlus (SERL) DVD + RW 4.7GB Jewel Case Singles 4x

- Certified by leading drive manufacturers
- Largest compatible DVD back-up and data archiving format for computer drives
- Super Eutectic Recording Layer optimises read/write performance and durability
- Record 4 hours of DVD quality television and video (16 hours of VHS quality)
- Ideal for archiving home movies
- Limited Lifetime Guarantee



Contact us for latest pricing

↑	Cat.	Qty 1+
Single	XC-4734	\$1.95

MEDIA - DVDS (CONTINUED)

VERBATIM DVD+R 16X

Verbatim DataLifePlus (Azo) DVD+R 4.7GB Jewel Case Singles 16x

- Compatible with 1X-16X DVD+R Hardware
- Record 4.7GB or 120 minutes of data and video in approximately 5 minutes
- Advanced AZO recording dye optimises read/write performance
- Ideal for recording up to 2 hours of DVD quality home movies and video clips
- Archive and back up, up to 4.7GB of important data
- Compatible with 16X DVD+R drives from Sony, Dell, HP, Compaq and others
- Read compatible with most DVD-ROM drives and DVD video players
- Limited Lifetime Guarantee



Contact us for latest pricing

↑	Cat.	Qty 1+
Single	XC-4733	\$1.25

VERBATIM DATALIFEPLUS (AZO) DVD-R 4.7GB JEWEL CASE SINGLES 16X

- Compatible with up to 16X DVD-R Hardware
- Advanced AZO recording dye optimizes read/write performance
- Ideal for recording up to 2 hours of DVD quality home movies and video clips
- Archive and back up, up to 4.7GB of important data
- Compatible with 16X DVD-R drives from Pioneer, Apple, Sony, Panasonic and others
- Read compatible with most DVD-ROM drives and DVD video players
- Limited Lifetime Guarantee



Contact us for latest pricing

↑	Cat.	Qty 1+
Single	XC-4731	\$1.25

VERBATIM DVD+R DL 8.5GB 8X SPINDLE 10 PACK

Double the storage capacity with two AZO recording layers on a single-sided disc - no need to turn the disc over.

- Huge 8.5GB capacity - records 240 mins of DVD quality television and video (960 mins of VHS quality)
- Supported by high speed Double Layer writers, up to 8X speed
- Compatible with DVD+R DL drives from leading manufacturers
- Ideal for archiving home movies
- Limited Lifetime Guarantee



Contact us for latest pricing

↑	Cat.	Qty 1+
10 Pack	XC-4746	\$26.95

VERBATIM DVD 4.7GB INKJET PRINTABLE 50 SPINDLE 16X

- 1X to 16X DVD recording speed
- Full-colour, high resolution, photo-quality printing
- Superior ink absorption
- Crisp & clear text reproduction
- Excellent ink drying time
- Compatible with inkjet disc printers from Primera, Microboards, Epson and others.
- Advanced AZO recording dye optimises read/write performance
- Superior Archival Life
- Limited Lifetime Guarantee



Contact us for latest pricing

↑	Cat.	Qty 1+
50 Disks DVD-R	XC-4738	\$32.95
50 Disks DVD+R	XC-4745	\$32.95

FIND OUT MORE IN STORE

Our staff can offer friendly and expert advice, from product information to electronics solutions; we're here to help.

MEDIA - BLU-RAY

VERBATIM BLU-RAY DISCS 25GB SINGLE

Blu-ray discs are designed for storing and playing back high definition video but the 25GB discs are also great for backing up valuable data. XC-4748 is rewriteable so you have extra flexibility in the event of burning the wrong data or for general re-use. High quality Verbatim super hard coat gives extra protection for general use. Case included.

Contact us for latest pricing



↑	Cat.	Qty 1+
BD-R 4x	XC-4747	\$4.50
BD-RE 2x	XC-4748	\$7.25

BLU-RAY

This format offers an immense storage capacity (up to 50GB) that is perfect for high-definition video recording and distribution, as well as for storing large amounts of data. The format shares the same form factors as existing CD and DVD optical discs allowing for backwards compatibility.

Due to the enormous data capacity the Blu-ray disc format can store HD-video in the highest possible quality. Depending on the encoding method, there is room for more than 7 hours of the highest HD-quality video.

MEDIA - CD

VERBATIM DATALIFE 80MIN 700MB CD-R JEWEL CASE SINGLES 52X

- Approved high speed 52X recording
- Compatible with leading manufacturers CD-R drives
- Ideal surface for personalising CD with marker or labels
- Long archival life
- Limited Lifetime Guarantee



Contact us for latest pricing

↑	Cat.	Qty 1+
Single	XC-4707	\$1.20

VERBATIM DATALIFEPLUS CD-R 80MIN/700MB INKJET PRINTABLE 50 PACK SPINDLE 52X

- Photo quality inkjet printable
- 52x recording
- Bright white surface
- Print pictures and text directly on the disc
- Compatible with direct CD/DVD inkjet printers
- Limited Lifetime Guarantee

Contact us for latest pricing



↑	Cat.	Qty 1+
50 Disks	XC-4718	\$24.95

STORAGE

SLIMLINE CD/DVD MAILING SLEEVE

PACK OF 10

Mail your precious CDs without fear of damage with this flexible clam style protector. The mailer has a clear window and centering spigot to securely hold the CD in place. Measures 125mm x just 4.5mm thick which won't crack and break like the average jewel case.

- Colour is opaque



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Pkt 10	AR-1480	\$5.95	\$5.25	\$4.75

CD/DVD JEWEL CASES FOR SINGLE DISK

PACK OF 5

Replacements CD case for those that break or wear out.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
Pkt 5	AR-1470	\$3.50	\$3.15	\$2.75

LINE FILTERS AND ADAPTORS

ADSL2+/VDSL2+ IN-LINE FILTER

If you have an ADSL2+ or VDSL2+ Internet connection, you'll need a compatible filter to keep unwanted noise from the phone or fax line. ADSL filters are not suitable as they don't allow the 2.2MHz bandwidth required for ADSL2+ and you won't get the full speed of your connection. Three different types available, a single in-line filter for use with extra phones or fax line, a filter/splitter for use with the primary line with the modem and phone line connected to it and a central filter for use when an alarm dialler or large number of phone outlets exist. Complies with ACIF S041.

ADSL2+/VDSL2+ IN-LINE FILTER:

Cat. YT-6091 (NOT AVAILABLE IN NEW ZEALAND)

ADSL2+/VDSL2+ FILTER/SPLITTER:

Cat. YT-6093 (NOT AVAILABLE IN NEW ZEALAND)

ADSL2+/VDSL2+ CENTRAL FILTER:

Cat. YT-6099 (NOT AVAILABLE IN NEW ZEALAND)



YT-6091

YT-6093

YT-6099

↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6091	\$16.95	\$14.95	\$13.35
	YT-6093	\$22.95	\$20.35	\$18.35
	YT-6099	\$35.00	\$31.45	\$27.95

CAT5 UTP SPLITTER

Cat5 splitters enable two different devices to share the same Cat5 cable. They are usually used in pairs, one at each outlet. Please note: you can't use this device to run two computers from one network port: you'll need a network switch for that. This product is unsuitable for gigabit networks.



↑	Cat.	Qty 1+	Qty 4+	Qty 10+
	YT-6090	\$16.95	\$14.95	\$13.35

MODULAR DOUBLE ADAPTOR - RJ12

Connect two telephones to the one socket.

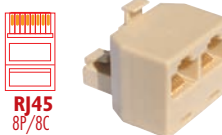
- 6P/4C



↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6056	\$5.95	\$5.25	\$4.75

MODULAR DOUBLE ADAPTOR - RJ45

RJ45 8P/8C plug to two sockets. Wired straight through - pin #1 to pin #1.



↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6082	\$11.95	\$10.70	\$9.50

MODULAR TRIPLE ADAPTOR RJ12 6P/4C

RJ12 plug to 3 sockets. Allows connection of 3 products to the 1 unit.



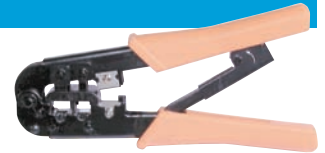
↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6057	\$12.95	\$11.35	\$10.35

CRIMPING TOOLS

6P/8P MODULAR CRIMP TOOL

This tool will crimp the following plugs: 6P2C, 6P4C - RJ12, 6P6C - RJ12, 8P - RJ45.

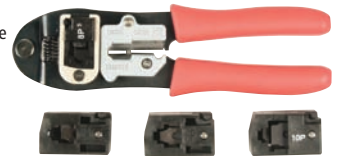
- It also cuts and strips the cable.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1935	\$19.95	\$17.70	\$15.70

4P/6P/8P/10P MODULAR CRIMP TOOL

This great tool will cut, strip and crimp flat telephone cable, or Cat5e type cable also. Constructed from high quality carbon steel, it features interchangeable dies and ergonomic design. It also has a brace to lock them closed.



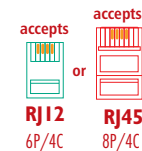
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	TH-1936	\$39.95	\$35.90	\$31.90

LOOK FOR OUR NEW MODULAR CRIMP TOOL WITH NETWORK/POE TESTER ON PAGE 134, 503.

TELEPHONE CONNECTORS

PLUG ADAPTOR 605 TYPE

Australian plug to RJ12 6P/4C or RJ45 8P/4C US socket. Includes reducing sleeve.

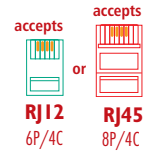


Note: Not available in New Zealand

↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6054	\$5.95	\$5.25	\$4.75

SOCKET ADAPTOR 610 TYPE

Australian socket to RJ12 6P/4C or RJ45 8P/4C US socket. Includes reducing sleeve.



Note: Not available in New Zealand

↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6052	\$6.95	\$6.25	\$5.50

DOUBLE ADAPTOR

Australian plug to two RJ12 6P/4C US sockets.

- Slimline package



Note: Not available in New Zealand

↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6023	\$6.95	\$6.25	\$5.50

US PLUG TO AUSTRALIAN PLUG

Includes Australian plug with RJ12 6P/4C socket in back and 2 metre lead with a RJ12 6P/4C on each end.



Note: Not available in New Zealand

↑	Cat.	Qty 1+	Qty 5+	Qty 20+
	YT-6045	\$6.95	\$6.25	\$5.50

US MODULAR INLINE COUPLER SOCKET TO SOCKET 6P/4C

Connects two US plugs together.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
YT-6060	\$5.95	\$5.25	\$4.75

MODULAR INLINE JOINER RJ45 8P/8C

RJ45 8P/8C socket to socket. Wired straight through. Pin #1 to pin #1. Note: Not suitable for Ethernet connections.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
YT-6080	\$4.95	\$4.45	\$3.90

MODULAR INLINE JOINER RJ45 8P/8C CROSSOVER

RJ45 8P/8C socket to socket. Wired in crossover format. Pin #1 to pin #8. Note: Not suitable for Ethernet connections.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
YT-6081	\$5.95	\$5.25	\$4.75

US MODULAR SKIRTING MOUNT WALL SOCKET RJ12 6P/4C

Standard US type wall socket. Suitable for all telephones.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
YT-6058	\$6.50	\$5.75	\$4.95

DB9 SOCKET TO RJ45

Socket adaptor. Can be wired without soldering.

- Unwired



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PA-0906	\$5.95	\$5.25	\$4.75

DB25 PLUG TO RJ45 8P/8C SOCKET ADAPTOR

Unwired. Can be wired without soldering.



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PA-0904	\$7.95	\$6.95	\$6.25

DB25 SOCKET TO RJ45 8P/8C SOCKET ADAPTOR

Unwired. Can be wired without soldering. Now ACMA Approved.



↑ Cat.	Qty 1+	Qty 4+	Qty 10+
PA-0905	\$7.95	\$6.95	\$6.25

WALL SOCKET 6P/4C

Square wall socket to suit RJ12 6P/4C plugs. Screw terminals for connection. • 44 x 44 x 24(D)mm.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
YT-6059	\$5.95	\$5.25	\$4.75

RJ45 SIDE ENTRY SURFACE MOUNT 8P/8C

Side entry surface mount voice grade US modular socket. Snap-on cover provides access to screw terminals for connection of wires. Double sided tape included for easy installation.

- Beige colour suits most environments.
- 50(W) x 57(H) x 20(D)mm.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
YT-6064	\$6.50	\$5.75	\$4.95

RJ45 TO RJ12 REDUCERS

These sleeves reduce a RJ45 size socket to a RJ12 size. This allows RJ45 sockets to accept either RJ12 or RJ45 plugs. • Sleeves are ivory in colour. • Pack of 5.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
Pkt 5 YT-6055	\$4.95	\$4.45	\$3.90

WALL PHONE BRACKET RJ12 6P/4C

Wall phone bracket designed to allow easy installation of telephones which have standard US modular wall mountings. The line is connected from bracket to phone by a 30mm modular cord.

- Fits standard Australian electrical switch plate installation hardware.
- Fawn colour.
- Socket 6P/4C.
- 76W x 119H x 9Dmm



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
YT-6062	\$7.95	\$6.95	\$6.25

EXTENSION CABLES RJ12 6P/4C

RJ12 6P/4C US Modular Plugs US plug to US plug. • Colour Ivory.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
300mm YT-6044	\$3.95	\$3.45	\$3.15
1.0m YT-6042	\$4.95	\$4.45	\$3.90
3.0m YT-6040	\$5.95	\$5.25	\$4.75
5.0m YT-6049	\$7.95	\$6.95	\$6.25
10.0m YT-6041	\$11.95	\$10.70	\$9.50
15.0m YT-6043	\$14.95	\$13.35	\$11.70

EXTENSION CABLES RJ12 6P/6C

Used in many office telephone Commander type systems, where 6 wires are required. Plug to plug. • RJ12 6P/6C US Modular Plugs • Colour Ivory.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
1.0m YT-6033	\$9.95	\$8.75	\$7.75
3.0m YT-6036	\$11.95	\$10.70	\$9.50
5.0m YT-6034	\$12.95	\$11.35	\$10.35
10.0m YT-6037	\$13.95	\$12.35	\$10.95
15.0m YT-6038	\$16.95	\$14.95	\$13.35

REPLACEMENT HANDSET CURLY CORD

4P/4C US MODULAR PLUGS



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
3.0m White YT-6047	\$8.95	\$7.95	\$6.95

RJ12 TO RJ45 MODULAR LEADS

RJ12 6P/4C to RJ45 8P/4C Colour: Ivory.



↑ Cat.	Qty 1+	Qty 5+	Qty 20+
2.0m YT-6086	\$8.95	\$7.95	\$6.95
3.0m YT-6087	\$12.95	\$11.35	\$10.35

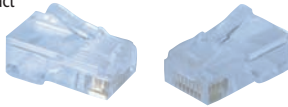
RJ45 MODULAR

MODULAR PLUGS

50µ" Gold Contact

8/8 - RJ45

- Not ACMA Approved



Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
10	PP-1436	\$7.95	\$6.95	\$6.25

SCREENED 8 PIN FOR STRANDED CABLE

8P8C with full screening and round cable entry for connection to STP cable.



ACMA Approved



Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
10	PP-1437	\$14.95	\$13.35	\$11.70

RJ45 MODULAR PLUGS FOR STRANDED/SOLID CAT 6 CABLE PK10

RJ45 Modular Plugs for Stranded and Solid Cat 6 Cable. Pack of 10



ACMA Approved



RJ45 STRANDED	Qty 1+	Qty 5+	Qty 20+
Pkt 10 PP-1447	\$13.95	\$12.35	\$10.95

8 PIN FOR FLAT STRANDED CABLE 8/8 - RJ45



ACMA Approved



8 PIN FOR ROUND SOLID CORE CABLE 8/8 RJ45 Suits Cat5e



ACMA Approved



RJ45 STRANDED	Qty 1+	Qty 5+	Qty 20+
Pkt 5 PP-1434	\$5.95	\$5.25	\$4.75

RJ45 STRANDED	Qty 1+	Qty 5+	Qty 20+
Pkt 50 PP-1435	\$29.95	\$26.90	\$23.70

RJ45 SOLID	Qty 1+	Qty 5+	Qty 20+
Pkt 6 PP-1438	\$6.95	\$6.25	\$5.50

RJ45 SOLID	Qty 1+	Qty 5+	Qty 20+
Pkt 50 PP-1439	\$34.95	\$31.45	\$27.90

RJ45 BOOTTS

A packet of boots to suit RJ45 8/8 plugs.



Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
4	PM-1441	\$4.95	\$4.45	\$4.15

Pkt	Cat.	Qty 1+	Qty 5+	Qty 20+
50 Blue	PM-1442	\$15.50	\$13.70	\$12.95

RJ45 CONNECTORS IP67 RATED

This set of connectors makes it safe to use RJ45 connectors in harsh environments. Rated to IP67 they are dust tight and water tight making them handy for control and communications applications outdoors or in industry workshops.



PS-1450



PP-1452



PP-1454

LTW®

Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Socket	PS-1450	\$27.95	\$24.95	\$22.35

Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Plug	PP-1452	\$14.95	\$13.35	\$11.70

Type	Cat.	Qty 1+	Qty 10+	Qty 50+
Cap	PP-1454	\$8.95	\$7.95	\$6.95

RJ11/12 MODULAR

50µ" Gold Contact

4 PIN FOR STRANDED CABLE 4/4 - RJ11



ACMA Approved



6 PIN FOR STRANDED CABLE 6/6 - RJ12



ACMA Approved



RJ11	Qty 1+	Qty 5+	Qty 20+
Pkt 5 PP-1430	\$2.45	\$2.15	\$1.95
RJ11	Qty 1+	Qty 5+	Qty 20+
Pkt 50 PP-1431	\$19.95	\$17.70	\$15.70
RJ12	Qty 1+	Qty 5+	Qty 20+
Pkt 5 PP-1432	\$2.95	\$2.60	\$2.30
Pkt 50 PP-1433	\$23.95	\$21.35	\$18.95

AUSTRALIAN / NZ FLUSH WALLPLATES

Our premium Australian / NZ flush plates not only accept our Cat 5e jacks shown below, they are also compatible with many other standard Australian mechanisms and jacks. The 2 piece design has a separate back plate and cover which is easily removed for painting.

- Fits standard Australian/NZ electrical switch plate installation hardware and screw centres.
- Perfect for easy flush installation on Gyprock walls.
- Supplied unloaded without jacks (see cat. YN-8036).
- Dimensions 116(W) x 75(H) x 13(D)mm.



	Cat.	Qty 1+	Qty 4+	Qty 10+
Single	YN-8015	\$5.95	\$5.25	\$4.75
Double	YN-8016	\$5.95	\$5.25	\$4.75
Triple	YN-8017	\$5.95	\$5.25	\$4.75

KEYSTONE WALLPLATES

Flush type wall plates to accept our standard keystone 110 jacks. Fits standard Australian electrical switch plate installation hardware and screw centres, making it perfect for easy flush installation on plasterboard or other cavity walls.

- Supplied unloaded without keystone jacks
- Dimensions 70(W) x 114(H) x 6(D)mm



	Cat.	Qty 1+	Qty 5+	Qty 10+
Single White	YN-8050	\$2.50	\$2.21	\$1.95
Double White	YN-8052	\$2.50	\$2.21	\$1.95
Triple White	YN-8054	\$2.75	\$2.45	\$2.15
Quad White	YN-8056	\$2.90	\$2.60	\$2.30
6 Way White	YN-8058	\$2.90	\$2.60	\$2.30

RJ11 SOCKET 6P4C KEYSTONE JACK

RJ11 Socket 6P4C Keystone Jack



	Cat.	Qty 1+	Qty 5+	Qty 10+
	YN-8026	\$4.95	\$4.45	\$3.90

KEYSTONE SOCKET JACKS

RJ45 Socket CAT5e Keystone Jack - White YN-8028



RJ45 Socket Cat6 Keystone Jack YN-8029

	Cat.	Qty 1+	Qty 5+	Qty 10+
Cat5e	YN-8028	\$4.95	\$4.45	\$3.90
Cat6	YN-8029	\$4.95	\$4.45	\$3.90

RJ45 CAT6 KEYSTONE SOCKET - WHITE

RJ45 Cat 6 Keystone Socket - white.



	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8033	\$14.95	\$13.35	\$11.70

RJ12 IDC SOCKET FOR FLUSH PLATES

Voice grade RJ12 6P4C IDC jack with 2 IDC connections per contact allowing easy loop-in, loop-out for typical voice applications. Compatible with most standard Australian flush plates. Rear termination with IDC impact tool.



	Cat.	Qty 1+	Qty 5+	Qty 20+
	YN-8035	\$12.95	\$11.35	\$10.35

CAT5E IDC JACK TO SUIT AUSTRALIAN / NZ STYLE FLUSH PLATES

Our premium Cat 5e IDC data jack is designed to suit our wallplates shown above. They also suit many other brands of Australian/NZ flush plates.



- Rear terminated with 110 or Krone impact tool.
- T568A & T568B colour coding for easy installation.
- ACMA Approved.
- Suit YN-8015/16/17 shown above.



ACMA Approved

	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8036	\$12.95	\$11.35	\$10.35

KEYSTONE SURFACE BOX

Side entry surface mount boxes to accept our standard keystone 110 jacks.



- Snap-on cover for easy installation & access to wiring.
- Single and duplex versions available.
- Double sided tape for easy installation.
- Supplied unloaded without keystone jacks.
- Colour is white.



ACMA Approved

WxHxD(mm)	Cat.	Qty 1+	Qty 4+	Qty 10+
Single 30x60x26	YN-8022	\$5.95	\$5.25	\$4.75
Double 55x60x26	YN-8024	\$5.95	\$5.25	\$4.75

110 KEYSTONE JACK

Suitable for use with our keystone wall plates and keystone surface boxes.

- For termination with ISBY impact tool and has combined 568A and T568B colour coding for easy installation.
- White in colour.



ACMA Approved



	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8030	\$12.95	\$11.35	\$10.35

CAT5E COUPLER 8P/8C

This coupler makes short work of small Cat 5 cabling jobs and enables pre-made cables to be used through-out. Simply clip into a wall plate and plug cables in on both sides.



ACMA Approved

	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8032	\$22.95	\$20.35	\$18.35

CAT5E SOCKET COUPLER STRAIGHT

Use this jack connector to join two fabricated Cat 5e cables.

- Straight through



	Cat.	Qty 1+	Qty 4+	Qty 10+
	YN-8034	\$16.95	\$14.95	\$13.35

LET'S POINT YOU TO THE RIGHT PAGE...

Gadgets & Gizmos

GADGETS

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Some traditionalists have frowned on our range of gadgets in the past. We make no apologies for this. Where do you draw the line between an electronic gizmo (such as a wireless battery charger) and an automatic blood pressure monitor?

We don't. We let you decide. Our gadget section has become a real fun part of our business, and as a benefit you will only find products from us that have been thoroughly evaluated and tested first with meaningful warranties.

3 CHANNEL REMOTE CONTROL CESSNA 182 STUNT PLANE

Modelled after the famous Cessna 182 Skylane, this 3 channel aircraft is easy, efficient and fun to fly. EPP composite material is used to achieve light weight, extra flexibility and strong resistance to crashes; 3 coreless motors also combines together to give excellent power. At a super long flight time of 25 minutes and a control distance of up to 200m, it is endless joy to see this classic back in the sky doing the likes 360° flips or spiral loops.

Specifications	GT-4130
Channels	3
Transmitter	2.4GHz
Batteries	Remote requires 4 x AA
Flight time	about 25 minutes
Charging time	40 - 60 minutes
Control distance	200m
Recommended for ages	14+
Dimensions	500(W) x 393(L) x 192(H)mm



	Cat.	Qty 1+	Qty 3+
3 Channel Stunt Plane	GT-4130	\$99.95	\$89.95

4 CHANNEL REMOTE CONTROL LEVEL STUNT PLANE

Take to the skies in this RC stunt plane. Capable of a range of aerobatics such as flips, loops, barrel rolls and magnificent high altitude stalls. Comes with two rechargeable Li-po batteries so you can fly for longer. The remote control allows aileron and direction trim, and will display battery level on the LCD. The packaging says it's suitable for ages 8 and up, but we suggest it's more suitable for a teenager or older.

Note: We highly recommend flying this plane in a wide open space, preferably on grass. Without adequate runway or flying space the fun can end quickly.

Li-po batteries can be recharged from USB port with supplied charging dock

Specifications	GT-4050
Channels	4
Transmitter	2.4GHz
Plane Battery	2 x 3.7V 130mAh Li-po batteries
Batteries	Remote requires 6 x AA batteries
Flight time	Approx 7 minutes per battery
Charge time	Approx 45 minutes
Charges off USB	Yes
Control distance	100m
Included Spare parts	Propeller
Recommended for ages	14+
Dimensions	450(wingspan) x 355(L)mm



	Cat.	Qty 1+	Qty 3+
4 Channel Stunt Plane	GT-4050	\$119.00	\$106.95
Spare Parts for GT-4050	Cat.	Qty 1+	Qty 3+
Upper and Lower Fuselage	GT-4051	\$14.95	\$13.45
Wing and Aileron Rudder Rod	GT-4052	\$14.95	\$13.45
Horizontal Tail Cover and Rudder	GT-4053	\$9.95	\$8.75
Vertical Tail Rudder Angle	GT-4054	\$4.95	\$4.45
Landing Gear and Mount	GT-4055	\$4.95	\$4.45
Motor and Seat with Shaft	GT-4056	\$14.95	\$13.45
Motor Seat Set and Blade	GT-4057	\$4.95	\$4.45
Li-Po Battery	GT-4058	\$9.95	\$8.75

QUADCOPTERS (CONTINUED)

4 CHANNEL MEGA QUADCOPTER WITH FLIP CONTROL

Bound to cause an influx of UFO sightings, this mega 4 channel + 6 axis gyroscope quadcopter is amazingly agile and stable. Features 4 big rotors that provide a huge amount of thrust for zooming through the skies. It's capable of flipping forwards, sideways, a mixture of both, as well as full 360° eversion resulting in some truly stunning aerial stunts. Thanks to the myriad of rotors and 6 axis gyroscope flying this unit feels very natural. It will respond accurately and quickly to the changes in throttle or direction which is great for beginners but also allows skilled pilots to nimbly tear through the atmosphere. It also has a massive range of about 100m horizontally and vertically. Overall an extremely satisfying and addictive quadcopter to fly.

Box contents:
1 x Quadcopter
1 x Remote control
4 x Spare blades
1 x Battery charger
1 x Power supply

SEE PAGE 518 FOR
ADD ON MODULES

Specifications	GT-3895
Channels	4
Transmitter	2.4GHz
Batteries	Requires 6 x AA
Flight time	6-8 minutes
Charge time	60-90 minutes
Charges off remote	No
Gyroscope	Yes
Charges off PSU	Yes
Charges off USB	No
Control distance	100m
Recommended ages	14+
Dimensions	480(L) x 480(W) x 83(H)mm



	Cat.	Qty 1 +	Qty 3 +
Mega Quadcopter	GT-3895	\$149.00	\$133.95
Spare Parts for GT-3895			
Battery 7.4V Li-Po 820mAh	GT-3894	\$34.99	\$31.45
Rotor Set 4 Front & Reverse	GT-3896	\$9.95	\$8.75
Foam Body & Main Frame	GT-3897	\$29.95	\$26.95
Rotor Arm and Bushes	GT-3898	\$9.95	\$8.75
Rotor Arm and Bushes	GT-3899	\$14.95	\$13.45

6 ROTOR REMOTE CONTROL 4 CHANNEL HEXCOPTER

Take to the skies in this 6-rotor aerial platform. The added rotors provide an unmatched level of flight stability allowing a novice to fly like a pro in a matter of minutes. For the more skilled pilots, this unit is fully capable of 360° aerial flips, hard banks left and right, up/down. These manoeuvres can be combined resulting in spectacular aerial stunts. This unit features massive control range up to 200m and a high capacity 1600mAh battery so you can fly longer.

Box contents:
1 x Hexcopter
1 x Remote control
6 x Spare blades
1 x Li-Po battery
1 x Battery charger
1 x Power supply



Specifications	GT-4060
Channels	4
Transmission	2.4GHz
Remote Batteries	Requires 6 x AA
Chopper Battery	Battery: 7.4V/1600mAh Li-Po
Flight time	8-12 minutes
Charge time	100-160 minutes
Charges off remote	No
Gyroscope	Yes
Charges off PSU	Yes
Charges off USB	No
Control distance	Up to 200 metres
Recommended ages	8+
Dimensions	800(L) x 800(W) x 110(H)mm

Flight Functions	
Functions	Up/Down, Left/Right, Forward/Backward, Leftward flying/Rightward flying
Suspension	360° flips
Weight	1978g



	Cat.	Qty 1 +	Qty 3 +
Hexcopter	GT-4060	\$229.00	\$209.00
Spare Battery to Suit	GT-4061	\$39.95	\$35.90

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CHARGERS

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\$94.95
GT-3835



CAMERA MODULE FOR GT-4060

P518

RC QUADCOPTERS & ACCESSORIES

QUADCOPTERS (CONTINUED)

PROFESSIONAL REMOTE CONTROL QUADCOPTER WITH GPS

An advanced quadcopter designed for the RC enthusiast. This model can be flown with superb stability thanks to the inbuilt altitude/position hold feature. It will hover by itself meaning constant throttle adjustments are not required. Features an onboard GPS which allows the quad to return to its starting position automatically. Flick the "turn back" toggle switch on the remote and the quad will RTH (return to home) like an obedient robot drone by flying upwards, then towards its origin then slowly descending automatically, landing and switching off its rotors. Spring action on the remote control permits fine adjustments to mid-air positioning.

To assist with directional judgement, red and blue LEDs are located on opposing ends of the shafts. Drawing inspiration from 'Batteries Not Included' two eyeball-like LEDs sit at the front of the unit, giving this flying automaton a semi-sentient appearance.

With additional attachments available separately, a GoPro® can be mounted to the underbelly. There is a standard bracket (GT-4042) for taking fixed position footage. We also have a gymbal mount for GoPro® Hero 3 (GT-4044) that will result in excellent video stability with minimal vibration from the chopper. This is the ultimate addition for documentary style video smoothness and professionalism. See our video of the gymbal in action.

A final note: This is not a toy, although hours of fun can be had flying it around we recommend it to the more hardcore RC enthusiast.

Watch our helpful videos online on how to assemble, control, and fly this like a professional.

Box contents:

- 1 x Quadcopter
- 1 x remote control
- 4 x blades
- 1 x USB cable
- 1 x battery charger
- 1 x power supply
- 1 x Li-Po battery
- 1 x Allen key
- 1 x spanner



Note: Shown here with GT-4044 camera attachment GoPro® not included



Specifications	GT-4040
Motors	4 x 950kV
Channels	4
Transmission	2.4GHz
Unit batteries	11.1V 2700mAh 25C Li-po battery
Remote control batteries	Requires 4 x AA
Flight time	8-12 minutes
Charge time	60-90 minutes
Charges off remote	No
Gyroscope	Yes
Charges off PSU	Yes
Charges off USB	Yes
Control distance	Up to 500m
Maximum rise/fall speed	3m/s
Recommended ages	14+
Dimensions	480(L) x 480(W) x 83(H)mm



↑	Cat.	Qty 1 +	Qty 3 +
Quadcopter with GPS	GT-4040	\$699.00	\$629.00
Spare Parts for GT-4040			
	Cat.	Qty 1 +	Qty 3 +
Top Body Cover	GT-4031	\$39.95	\$35.90
Lower Body Cover	GT-4032	\$49.95	\$44.90
Horse Stand	GT-4033	\$9.95	\$8.75
Stand with Magnetic Compass	GT-4034	\$34.95	\$31.45
Rotor Set - Pack of 2	GT-4035	\$9.95	\$8.75
Negative Rotor Set - Pack of 2	GT-4036	\$9.95	\$8.75
Co-Rotation Motor	GT-4037	\$49.95	\$44.90
Spare Reverse Motor	GT-4038	\$49.95	\$44.90
Rechargeable Battery Pack	GT-4039	\$89.95	\$80.95

QUADCOPTER ACTION CAMERA MOUNTS

ACTION CAMERA MOUNT BRACKET TO SUIT GT-4040

Mount your action camera to our Professional Quadcopter (GT-4040) and capture every second of flight.

Suitable for use with:

- All models of GoPro®



Camera not included



↑	Cat.	Qty 1 +	Qty 3 +
	GT-4042	\$39.95	\$35.90

LOOKING FOR PARTS FOR SUPERCEDED MODELS - CHECK OUT PAGE 518

BRUSHLESS GYMBAL ACTION CAMERA BRACKET FOR GOPRO® HERO 3

Gymbal mount your GoPro® Hero 3 to our GT-4040 Professional Quadcopter. The gymbal will keep the camera steady and focused at the fixed angle regardless of which way the quad is leaning (within certain angular limits of course). Features silicone shock absorbers that drastically reduce vibration on the camera. No more shaky videos. Now you can take own smooth documentary style shots.

Suitable for aspiring directors, skateboarders, or even people involved in search and rescue to help review deployment procedures. With a bit of creativity, it could also be mounted to any number of things such as a motorbike helmet, skateboard, RC plane. As long as you can give it enough power.



IMPORTANT...

Only compatible with GoPro® Hero 3.
Note: camera not included.

Note: Product might vary slightly from the one shown

↑	Cat.	Qty 1 +	Qty 3 +
Gymbal Action Camera Bracket	GT-4044	\$249.00	\$225.00



RC HELICOPTERS - DOUBLE BLADE

MINI 3 CHANNEL RC HELICOPTER WITH GYROSCOPE

A 3 channel chopper employing a coaxial rotor design resulting in a strong gyroscopic effect for stable flight control. Able to fly in six directions which include rotation clockwise/anticlockwise, forward/backward and up/down this chopper will provide hours of fun for children and adults alike. The engine will power off when the blades are choked to prevent the chopper from shredding its thrust mechanism. Transmitting on 2.4GHz the signal is stable and the range is extended.

Box contents:
1 x Helicopter
2 x Spare rotors
1 x Spare tail rotor
1 x Remote
1 x Connect buckle
1 x USB charge cable

Specifications	GT-3565
Channels	3
Transmitter	2.4GHz
Batteries	Remote requires 4 x AA batteries
Flight time	5-7 mins
Charge time	50-60 mins
Charges off remote	Yes
Charges off PSU	No
Charges off USB	Yes
Gyroscope	Yes
Included spare parts	Tail blades and tail rotor
Recommended for ages	14+
Dimensions	195(L) x 95(H) x 44(W)mm



YOU CAN...
Fly up to 10 at the same time without conflict



PILOT SKILL: BEGINNER

	Cat.	Qty 1 +	Qty 3 +
Helicopter	GT-3565	\$39.95	\$35.90
Spare Parts for GT-3565			
Blade Set Main A+B Tail	GT-3566	\$9.95	\$8.75
Balance Bar, Buckle & Blade Grip	GT-3567	\$9.95	\$8.75
A+B Gear Set	GT-3568	\$6.95	\$6.25

3 CHANNEL RC HELICOPTER WITH GYROSCOPE

This 3 channel helicopter has a very strong aluminium frame and is matched with a powerful motor to provide enormous lift. With its substantial weight and power, it is advisable to fly this chopper in a large open spaces (can be flown outdoors in calm conditions) away from obstacles. Features a built in gyroscope which provides stable flight. It is very easy to fly, controlled with its 3 Channel 27MHz Remote. Equipped with a high capacity Li-Po battery which provides up to 8 minutes of flight time. Supplied with mains charger.

- 7.4V 1500mAh Li-Po rechargeable battery included
- 27MHz Remote control
- Full scale remote control
- Smooth hovering performance
- Long battery life
- Energy saving power cut off

Note: Due to its size and power, adult supervision is recommended.

Specifications	GT-3360
Channels	3
Transmitter	27MHz (A+B frequencies)
Batteries	Remote requires 4 x AA
Flight time	8 mins
Charge time	160 mins
Charges off remote	No
Charges off PSU	Yes
Charges off USB	No
Gyroscope	Yes
Included spare parts	Tail rotor
Recommended for ages	14+
Dimensions	775(L) x 130(W) x 305(H)mm

NOTE!
Colour may vary



YOU CAN...
Fly up to 10 at the same time without conflict



PILOT SKILL: INTERMEDIATE

	Cat.	Qty 1 +	Qty 3 +
Helicopter	GT-3360	\$89.95	\$80.95
Spare Parts for GT-3360			
Main Rotor Blade and Tail Set	GT-3361	\$6.95	\$6.25
Main A+B Gear Set	GT-3362	\$8.95	\$7.95
Balance Bar, Connecting Buckle & Blade Grip Set	GT-3363	\$5.95	\$5.50
Spare 7.4V Li-Po Battery	GT-3364	\$26.95	\$23.95
Reverse Motor Assembly	GT-3864	\$5.95	\$5.50
Motor Assembly Shaft, Orange Left	GT-3865	\$5.95	\$5.50
Motor Assembly Shaft, Orange Right	GT-3866	\$5.95	\$5.50

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BATTERY TESTER

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RC HELICOPTER ACCESSORIES

SPARE PARTS FOR SUPERCEDED HELICOPTERS

↑ Spare Parts for GT-3263	Cat.	Qty 1 +
Stabiliser Bar Set	GT-3301	\$6.95

↑ Spare Parts for GT-3350 & GT-3380	Cat.	Qty 1 +
Gear Set	GT-3701	\$6.95
Balance Bar & Connecting Buckles	GT-3702	\$1.95
Frame/Shaft/Blade Grip	GT-3704	\$2.95

↑ Spare Parts for GT-3382	Cat.	Qty 1 +
Gear & Inner Shaft Set	GT-3727	\$14.95
Tail Rotor & Rack	GT-3728	\$4.95
Blade Grip & Inner Shaft	GT-3729	\$1.95

↑ Spare Parts for GT-3384	Cat.	Qty 1 +
Rotor Blade Set	GT-3710	\$2.95
Gear Set	GT-3713	\$7.95
Outer Shaft	GT-3715	\$14.95
Ball Linkage	GT-3719	\$6.95

↑ Spare Parts for GT-3386	Cat.	Qty 1 +
Blade Set Main A+B with 3 Rotors	GT-3387	\$2.95

↑ Spare Parts for GT-3430	Cat.	Qty 1 +
Rotor Blade & Tail Set	GT-3431	\$2.95
Main A & B Gear Set	GT-3433	\$2.95

↑ Spare Parts for GT-3460	Cat.	Qty 1 +
Main Gear Set	GT-3462	\$2.95
Balance Bar, Connecting Buckle & Blade Grip Set	GT-3463	\$2.95

↑ Spare Parts for GT-3490	Cat.	Qty 1 +
Rotor Blade & Tail Set	GT-3491	\$2.95
Main A & B Gear Set	GT-3492	\$2.95

SEE WEBSITE FOR OUR COMPREHENSIVE RANGE OF SPARE PARTS FOR CURRENT & SUPERCEDED HELICOPTERS & RC CARS.



↑ Spare Parts for GT-3530	Cat.	Qty 1 +
Gear Set A+B	GT-3532	\$2.95
Tail Module & Blade	GT-3534	\$2.95
Frame + Shaft + Blade Grip	GT-3535	\$2.95

↑ Spare Parts for GT-3562	Cat.	Qty 1 +
Main Blade A+B Tail Set	GT-3556	\$2.95
Balance Bar, Buckle & Blade Set	GT-3558	\$2.95
Rechargeable Battery	GT-3559	\$19.95

↑ Spare Part for GT-3860	Cat.	Qty 1 +
Motor	GT-3862	\$5.95

↑ Spare Parts for GT-3360	Cat.	Qty 1 +
Main A+B Gear Set	GT-3362	\$8.95
Balance Bar, Connecting Buckle & Blade Grip Set	GT-3363	\$5.95
Reverse Motor Assembly	GT-3864	\$5.95
Motor Assembly Shaft, Orange Left	GT-3865	\$5.95
Motor Assembly Shaft, Orange Right	GT-3866	\$5.95

↑ Spare Parts for GT-3820	Cat.	Qty 1 +
Spare Rotors A+B Pk.4 Set	GT-3821	\$9.95

↑ Spare Parts for GT-3810	Cat.	Qty 1 +
Main Gear Set	GT-3812	\$9.95

1080P VIDEO RECORDER CAMERA MODULE TO SUIT GT-3810/GT-3895/GT-4060

Attach this camera module to the underbelly of a suitable RC chopper or quadcopter and it will record 1080p footage to a microSD card (available separately). Record your action then upload to YouTube® for the world to share.

- Suitable for models: GT-3810/GT-3895/GT-4060
- Max microSD card capacity: 32GB



NEW 2015



↑	Cat.	Qty 1 +	Qty 3 +
	GT-3835	\$94.95	\$85.50

ADD-ON MODULES FOR GT-3810, GT-3820 & GT-3895

Add-on modules for helicopter models GT-3810, GT-3820 & GT-3895.

CAMERA MODULE ADD-ON

Attach this camera module to the underbelly of a suitable RC chopper or quadcopter to record footage onto a microSD card. Record your action then upload to YouTube® for the world to judge.

720P MODULE

- Requires a microSD card up to 32GB

BUBBLE BLOWER MODULE

Allows you to release a flurry of bubbles as you fly.

GT-3832



GT-3832

GT-3838



NEW LOW PRICE

↑	Cat.	Qty 1 +	Qty 3 +
720p Camera	GT-3838	\$54.95	\$49.45
Bubble Blower	GT-3832	\$14.95	\$13.35

CUSTOMERS PLEASE NOTE! TECHSTORE SPECIALS

SUPER BARGAINS ONLY AVAILABLE THROUGH TECHSTORE

Many of you who see our regular ads have made personal visits for some products not available to shop customers. These products are usually in such short supply there is simply not enough to distribute to all stores. Indeed some items could be as few as half a dozen. Such goods are sold through our "TECHSTORE".

When we advertise these products, we box them in a special section marked off with 'TECHSTORE ONLY - NOT AVAILABLE IN RETAIL STORES'. Unfortunately many do not notice this and become angry when the product is not in their local store.

Please do not blame the local manager for this, he has no control, nor can he transfer stock from the TECHSTORE to his shop for you. If you wish to buy these items you must hurry and order direct to the TECHSTORE.

MORE INFO WEB

RC BOATS

MINI RC RACING BOAT

A beautifully crafted RC race boat with an insanely powerful little motor. It screams around ponds or lakes at lightning speeds. Features a handy self-righting function so you if you capsize it accidentally, just pull the throttle and it will flip back upright so you can get back to racing. It also means you can just throw the boat into the water, hit the throttle then watch it roar off. The hydrodynamic design allows the hull to cut through the chop with ease. You can move forwards, backwards, and swiftly turn left or right. Sure to give hours of fun. Gun style remote with digital proportional steering for finer rudder control. Check out our video online! Not recommended for salt water.

- Suitable for ponds, lakes, swimming pools, and calm rivers
- 2.4GHz remote control with an effective range of up to 100m
- Professional large torsion propeller
- Excellent craftsmanship

Box contents:

1 x Boat	1 x Remote
1 x Spare propeller	1 x Boat stand
1 x Battery	1 x Battery charger
1 x Bow protector	



Specifications	GT-3615
Run time	9 minutes
Charge time	3.5 hours
Controller requires	6 x AA batteries
Recommended for ages	8+
Dimensions	340(L) x 90(W) x 70(H)mm

↑	Cat.	Qty 1+	Qty 3+
Mini RC Racing Boat	GT-3615	\$79.95	\$71.95
Spare Parts for GT-3615			
Rudder, Pipe and Propeller	GT-3616	\$9.95	\$8.75
Spare Battery	GT-3617	\$19.95	\$17.70

LARGE RC RACING BOAT

Able to rip through water at a staggering speed of up to 24km/h. This hydrodynamic designed boat is very stable and maneuverable. It has a very powerful motor and an ingenious water cooled system to ensure countless hours of fun. You can move forwards, backwards, and swiftly turn left or right. A 2.4GHz gun style remote with digital proportional steering for finer rudder control at distances up to 100m. Suitable for ponds, lakes, swimming pools, and calm rivers. Not recommended for salt water.

- 2.4GHz remote control with an effective range of up to 100m
- Large screw propeller
- Excellent craftsmanship
- Mains charger and spare propeller included

Box contents:

1 x Boat
1 x Power adaptor
1 x Battery charger
1 x Remote
1 x Battery
1 x Boat stand



Specifications	GT-3775
Run time	7-8 minutes
Charge time	1 hour
Controller requires	4 x AA batteries
Recommended for ages	8+
Dimensions	450(L) x 120(W) x 80(H)mm

↑	Cat.	Qty 1+	Qty 3+
Large Racing Boat	GT-3775	\$109.00	\$89.95
Spare Parts for GT-3775			
Rudder, Pipe and Propeller	GT-3776	\$9.95	\$8.75
Spare Battery	GT-3777	\$34.95	\$31.45

RECHARGEABLE RC BRUSHLESS RACE BOAT

Our fastest racing boat yet, reaching a top speed of 45km/h, it literally leaves all competitors behind. Equipped with a two-way super power speed controller, 2815-35000kv brushless motor and water-cooling system, the boat is not only fast but also flexible and stable, even when pushed to the limit in straining long runs. This boat will automatically flip over to recover when capsized in extreme racing.

- Suitable for ponds, lakes, swimming pools, and calm rivers
- 2.4GHz remote control with an effective range of up to 100m
- Professional large torsion propeller
- Excellent craftsmanship

Box contents:

1 x Boat	1 x Power adaptor
1 x Battery charger	1 x Remote
1 x Battery	



Specifications	GT-4120
Run Time	5 to 6 minutes
Charge Time	3 hours
Controller requires	6 x AA batteries
Recommended for ages	14+
Dimensions	460(L) x 125(W) x 118(H)mm

↑	Cat.	Qty 1+	Qty 3+
Race Boat	GT-4120	\$229.00	\$209.00
Spare Parts for GT-4120	Cat.	Qty 1+	Qty 3+
Lithium Rechargeable Battery	GT-4121	\$39.95	\$35.90
Rudder, Pipe and Propeller	GT-4122	\$14.95	\$13.45

MINI RC CARS

RC CAR IN A CAN

An ordinary looking soft drink can, but contained within is a little remote control car! These highly detailed 1:58 scale sports cars feature working LED headlights and red reverse lights, and come with 4 tiny red witches hats for refining your driving skills or for simply making mini crashes more dramatic. The car, remote control and witches hats all fit snugly inside the can. The cars are recharged by plugging into the remote control.

- Contains 100% remote control car
- Adjustable/detachable antennas

Specifications	GT-3596
Remote requires	2 x AA batteries
Charge time	5 minutes
Remote control	27MHz and 40MHz
Suitable for ages	3+
Car dimensions	75(W) x 45(W) x 20(H)mm Approx



8 models to choose from with varying car designs and colours.

	Cat.	Qty 1+	Qty 3+
GT-3596		\$17.95	\$15.95

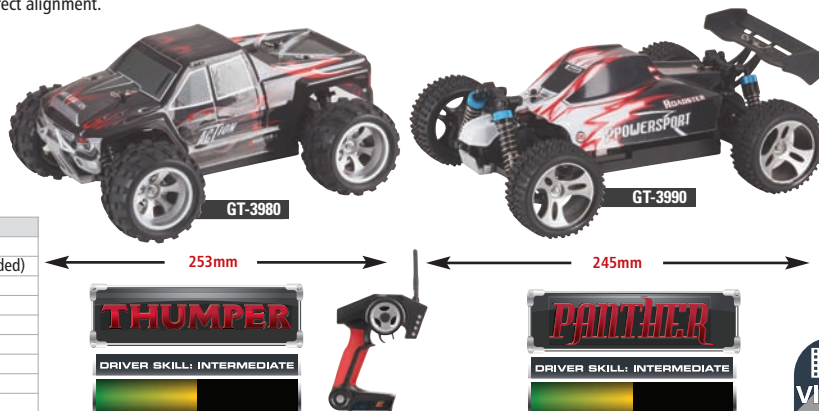
1:18 SCALE 4WD REMOTE CONTROL TRUCK OR BUGGY

Super fast 1:18th scale RC vehicles fitted with digital proportional steering for highly realistic turn control. These small but powerful units pack 390 size brush motors allowing velocities up to 50kmh. This size to speed ratio is, to put it frankly, ridiculous. They'll zip around a concrete surface like lightning. At these speeds walls are your enemy, so steer clear of them. Four wheel independent suspension to cushion the impacts and front/rear differential is icing on the cake. Comes with a 2.4GHz gun style remote that allows wheel trim to correct alignment.

NEW
2015

Box contents:

- 1 x RC car
- 1 x Remote control
- 1 x Rechargeable Li-Po battery
- 1 x Battery charger
- 1 x Power Adaptor



Specifications	GT-3980/GT-3990
Remote requires	4 x AA batteries
Car requires	7.4V 1100mAh Li-Po battery (included)
Vehicle speed	Up to 50kmh
Average drive time	10 minutes
Charge time	150 minutes
Control distance	100m
Suitable for ages	8+
Dimensions GT-3980	253(L) x 200(W) x 115(H)mm
Dimensions GT-3990	245(L) x 175(W) x 95(H)mm



VIDEO

	Cat.	Qty 1+	Qty 3+
Remote Control Truck	GT-3980	\$139.00	\$124.95
Remote Control Buggy	GT-3990	\$139.00	\$124.95
Spare Battery to Suit either model	GT-3981	\$29.95	\$26.95

1:12 SCALE ELECTRIC RC CARS

High speed 1:12 scale RC cars for fast high level driving. The cars feature DPS (digital proportional steering) so, like a real car, you can make fine adjustments to the car's direction for potentially greater control and more skilful manoeuvres. They feature rear wheel drive for drifting, sliding, and throwing up plumes of sand on dusty dirt tracks. All comfortably absorbed through the front and rear independent suspension. A maximum speed of about 40kmh means you'll be screaming along tracks with only your reaction time to save you. Combine that with a slight incline and airtime will ensue. The 2.4GHz pistol grip remote control can control up to 100m and has 50 channels, so buy a few for your family or friends and race against each other without interference.

VIDEO

Box contents:

- 1 x RC Car
- 1 x Rechargeable Li-Po battery
- 1 x Power adaptor
- 1 x Remote Control
- 1 x Battery charger box
- 1 x Crossed spanner

Specifications	Both Models
Frequency	2.4GHz
Vehicle speed	Up to 40kmh
Motor	380 size
Average drive time	10 minutes
Car battery	7.4V 1500mA Lithium-ion battery included
Remote requires	6 x AA batteries
Recommended for ages	14+
Dimensions	348(L) x 230(W) x 115(H)mm



	Cat.	Qty 1+	Qty 3+
1:12 Scale RC Truggy	GT-3786	\$139.00	\$124.95
1:12 Scale RC Truck	GT-3788	\$149.00	\$133.95
Spare Parts for Both Models	Cat.	Qty 1+	Qty 3+
Spare Receiver PCB for GT-3786	GT-3922	\$24.95	\$22.35
Spare Receiver PCB for GT-3788	GT-3942	\$24.95	\$22.35
Spare DC Motor for GT-3786	GT-3944	\$24.95	\$22.50
Spare DC Motor for GT-3788	GT-3946	\$24.95	\$22.50
Spare Servo for GT-3786/GT-3788	GT-3943	\$12.95	\$11.35
Spare Battery for GT-3786	GT-3921	\$29.95	\$26.90
Spare Battery for GT-3788	GT-3941	\$29.95	\$26.90

GAMES - JUST FOR FUN

INFRARED GUN & MECHANICAL ALIEN BUG SET

Train and master the weapon of your choice and get ready for the apocalyptic invasion of alien bugs! This hyper-real laser gun can simulate a pistol, shotgun, submachine gun and even rocket launcher. At 40m striking distance with vibration attacking alert, you can pick any battleground to test yourself in tricky scenarios. The alien bug pops belly up when shot on target, a few seconds later they pop back up to life and scurries away. Purchase additional alien bugs (GT-4073) available separately and blast away hours of fun. Once mastered, you can setup up to four teams for a laser tag with your human counterparts.

- Includes 1 x laser gun and 1 x alien bug
- Gun battery: Requires 4 x AA
- Bug battery: 3.7V 45mAh rechargeable and USB charging cable supplied
- Recommended for ages: 8+
- Gun dimensions: 300(L) x 172(W) x 52(D)mm
- Bug dimensions: 75(L) x 57(W) x 45(H)mm



↑	Cat.	Qty 1+	Qty 3+
Gun with 1 Alien Bug	GT-4072	\$54.95	\$49.95
Additional Alien Bug	GT-4073	\$19.95	\$17.95

ELECTRONIC DART BOARD

A completely automated way of enjoying Darts. Features over 25 classic dart games including 301, 501, cricket, cut-throat, count-up and more. It also has sound effects and talks you through the game and informs you whose turn it is, and so on. It features a special surface and safe plastic tip darts that you use instead of the regular metal type.

- There are over 25 classic dart games and up to 110 variations with handicapping.
- No metal tips - safe for children 8+ (with adult supervision)
- Supplied with 6 darts and 30 spare replacement tips
- Requires 3 x AA batteries
- Dimensions: 435(H) x 380(W) x 20(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Dart Board	GH-1158	\$59.95	\$53.95	\$47.90

ELECTRIC SHOCK ROULETTE GAME

Electronic shock game of chance. Up to four willing participants place their finger on the roulette machine, press the spin button and the unlucky one will get a mild electric shock. Features variably shock control for different scream levels.

- Up to 4 players
- Requires 3 x AAA batteries
- Recommended for ages 14yrs+

Caution: Do not use if you suffer from epilepsy, have a pacemaker, heart condition or similar illness, or while pregnant.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Shocking Fun	GH-1092	\$19.95	\$17.70	\$15.70

REMOTE CONTROLLED SECRET FARTER

We had lots of fun testing this remote controlled high-tech replacement for the traditional Whoopee Cushion. Just hide the box near your intended victim and activate it from up to 15 metres distance with your remote control button. Not only will they be embarrassed, they won't even know who is responsible. Great fun at home or the office.

- 7 different realistic fart noises.
- Requires 4 x AA batteries
- 1 x 12V battery for key fob (supplied) Use SB-2376.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Secret Farter	GH-1088	\$19.95	\$17.70	\$15.70

CHOKE-A-CHICKEN ANIMATED CHOOK

The Choke-A-Chicken flaps and waddles around doing the Chicken Dance, clucking and flapping its wings in sync with the Chicken Dance melody. Grab him by the neck and he will squawk and cluck like mad, flapping his wings and feet wildly as if he is really being choked. Put him down and he will waddle off, singing and dancing as he goes.

- 300mm tall
- Requires 4 x AA batteries

Reintroduced due to popular demand!



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Choke-A-Chicken	GT-3095	\$34.95	\$31.45	\$27.90

USELESS BOX NOVELTY TOY

One mystical black box with a single toggle switch. Every time you flip the switch, a little finger pops out from the box and turns itself off. No one on this planet has yet figured out a use for this, hence the name 'Useless Box'. There is one thing however that we did notice, this magical box leaves anyone who comes into contact with a mesmerised smile on their face.

- Battery: Requires 2 x AA batteries
- Dimensions: 140(H) x 80(W) x 75(D)mm

You've got to watch the video!



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	GT-3706	\$29.95	\$26.95	\$23.70

BUBBLE MAKING KIT

Create magnificent bubble spheres and carry them through the air with the magic gloves. Balance bubbles on a fingertip or let them softly land on your palm in a spectacular display of wizardry. This kit includes bubble liquid, 2 gloves, a standard yellow bubble wand and a bubble cone.



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Bubble Making Kit	AB-1226	\$12.95	\$11.35	\$10.35
Spare Bubble Liquid 2 x 100ml	AB-1233	\$3.95	\$3.55	\$3.15

USB PLASMA BALL

Create a dazzling lighting effects with this USB Powered Plasma Ball that will surely impress your colleagues!



Plasma is the fourth state of matter - as the ball becomes energised, the gases inside light up and turn into plasma. By touching the outside of the ball, you provide a path for the energy to escape, so you can produce amazing effects.

- Requires 4 x AAA batteries for portable use
- Dimensions: 130(H) x 100(W)mm

Note: Laptop not included

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Plasma Ball	GE-4089	\$19.95	\$17.70	\$15.70

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HOME & OFFICE LIGHTING

LED CANDLE SETS

SOLAR RECHARGEABLE LED CANDLE

An ideal lighting solution for your next BBQ dinner or family gathering. Never worry about the mess and fuss of candle wax again. Simply turn it upside down to charge from the sun through a solar panel integrated in the bottom and when darkness falls, turn them over again and the LED candle will automatically come on. A fantastic idea for restaurants and outdoor entertainment areas.

- No batteries required
- Long lasting
- Dimensions: Candle - 92mm tall



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Each	ST-3925	\$14.95	\$13.35	\$11.70

LED TEALIGHT CANDLE SET OF 12

Conventional candles are potentially hazardous in the family home. Today's technology has allowed us to experience a safe and convenient tealight without the smoke or messy wax. Battery operated & simple to use, these lights flicker just like real candles. Ideal for any table, shelves, bedrooms, bathrooms or patios.

- Comes in a set of 12 individual candles.
- Batteries included
- Long life LED



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Set of 12	ST-3921	\$14.95	\$13.35	\$11.70

CANDLE SETS

3 PIECE FLAMELESS LED CANDLE SET

Who needs conventional candles, when you can experience the safe and convenient LED light technology with this 3 piece Flameless LED Candle set. Featuring a soft yellow glow that flickers just like a conventional candle would. This is also made from real wax in which is nearly indistinguishable from a flamed candles. The candle sets also comes with a remote control to switch them on or off from a distance. This will make a nice set for the lounge room, dining table or even the bedroom.

- 3 Piece LED candles
- Infrared Remote
- Flameless Technology
- 9 x AAA batteries required



REAL WAX

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Set of 3 with Remote	ST-3927	\$24.95	\$22.35	\$19.70

3 PIECE FLAMELESS LED CANDLE SET WITH TIMER

This is a set of 3 x genuine wax (slightly scented) candles all 78mm Dia. but in heights of 75, 100 & 150mm respectively. They all have an led light inside (where you would expect to see a wick) which glows a yellow colour and flickers realistically. Best of all, they are completely safe. You can go to bed at the end of the night forgetting to turn them off knowing that they will turn off automatically after 4 hours.

- They require 3 x AAA batteries each - available separately
- Candles can be turned on or off independently
- A fantastic, reliable product and cheaper than real candles



REAL WAX

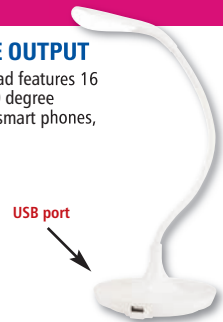
↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Set of 3 with Remote	ST-3929	\$24.95	\$22.35	\$19.70

TABLE / DESK LAMPS

16 LED DESK LAMP WITH USB CHARGE OUTPUT

A compact desk lamp for home or work. The lamp head features 16 LEDs and is connected to a flexible gooseneck for 360 degree adjustment. Includes a built-in USB port for charging smart phones, tablets etc. Simply touch on and off.

- Colour temperature: 5600 - 6000K
- Lumens: 130
- Input voltage: 5VDC
- Power consumption: 3W
- USB Output: 5V/500mA
- 40,000 hour LED life
- Weight: 210g
- Dimensions: 320(H) x 120(W) x 215(D)mm



USB port

↑	Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+
	130	SL-3140	\$39.95	\$35.90	\$31.90

ADJUSTABLE COLOUR TEMPERATURE LED LAMP WITH LCD CLOCK

This is no ordinary LED lamp. At the touch of a button on the base, choose between cool white, warm white and natural colour temperatures, and adjust the brightness to suit your application. It also has an LCD screen located on the arm of the lamp that displays the date, time, and temperature, making it ideal for the office or study desk or bedside table. It has a sturdy design and has a piano white finish. The light features advanced luminous technology, so there is no glare or no stroboscope, and to top it off, the position of lamp head and arm are adjustable to give you the perfect lighting angle. Supplied with a mains power adaptor.

- 3 light modes, warm white, cold white and natural
- 14 x LED lights (Save a third of the power compared to a traditional bulb)
- Zero UV light output
- Touch sensitive switches for easy operation
- LCD display with calendar, alarm clock, snooze and thermometer functions
- Foldable structure (Lamp head 180° and lamp arm 90°) makes it portable
- CR2032 button cell included



Specifications	SL-3142
Power	5V 800mA
LED lifetime	40,000 hours
Dimensions	330(H) x 145(L) x 145(W)mm
Weight	690g

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	SL-3142	\$69.95	\$62.95	\$55.95

LED TABLE LAMP & WORK LIGHT

This sleek modern LED table lamp not only looks great but lasts up to 40 times longer than its incandescent rivals. The light produced by the LEDs has a rendering index of 90+ (CRI) making it akin to sunlight. Flicker free, this helps to minimise the strain on your eyes as you read at night or work on fine hobby projects. The touch sensitive buttons allow you to control power and colour temperature so you can set it to a very bright white light or a warm white colour. The LED arm can be folded and rotated around a wide range of directions and can also be completely detached from the base so you can use it as a work light. A brilliant feature adding great versatility.



Specifications	SL-3139
Colour Temperature	3500-5500K
Power	9W
Illumination	100-500 Lumens
Luminous Intensity	> 600Lux
Lamp holder arm	340° swivel
Base	360° swivel
Dimensions	
Light Arm (folded)	345(L)mm
Light Arm (extended)	665(H)mm
Base	199(Dia.) x 16(H)mm

↑	Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+
	500	SL-3139	\$89.95	\$80.95	\$71.95

LET'S FIND EVERYTHING YOU NEED!

FROM
\$1.95
SB-2426



AAA BATTERIES

P323

FROM
\$2.95
SB-1723



AAA RECHARGEABLES

P327

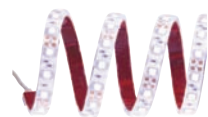
FROM
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MB-3564



BATTERY CHARGERS

P329

FROM
\$49.95
ZD-0579



LED STRIP LIGHTING

P350

TABLE / DESK LAMPS (CONTINUED)

LED DESK LAMP WITH BUILT-IN QI BATTERY CHARGER

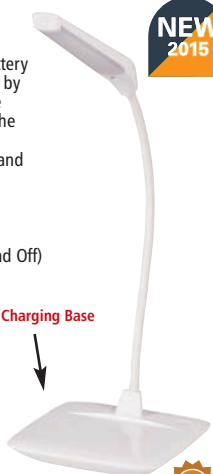
Unlike ordinary lamps, this one features a built-in Qi battery charger, so you can charge your Qi enabled Smartphone by placing it on the base for a wireless charge. (Qi pads are available separately to convert popular Smartphones). The lamp features 36 cool white LEDs which can be dimmed depending on the application such as reading, relaxing and sleeping. A mains adaptor with 1.5m lead is supplied.

- Qi compatible wireless charging
- Adjustable neck and angle
- Five-step brightness control (100%, 60%, 30%, 5% and Off)

Specifications	SL-3144
Input voltage	12V/2A
Current consumption	600mA
Power consumption	6W (LED)
Wireless charging	5W (Qi v.1.1.2 supports low power transmitter)
Hi-power LED	36 pcs
Illumination	1100Lx (35cm distance)
Lumens	500
Colour temperature	5600-6000K
Expectancy	40,000hrs
Dimensions	350(H) x 150(L) x 130(W)mm

↑ Lumens	Cat.	Qty 1+	Qty 3+	Qty 6+
500	SL-3144	\$129.00	\$115.95	\$102.95

Qi Charging Base



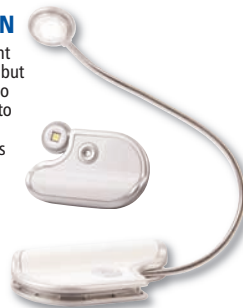
BOOK LIGHT

BOOK LIGHT WITH 2 MODE OPERATION

Designed to be portable and practical! This book light will give you more than enough light to read in bed but won't disturb your sleeping partner. The light has two brightness levels and uses a super bright 0.5W LED to fill your page with light and make reading a breeze. The slender design with its flexible gooseneck means you can position it any way required and makes a good companion on an overnight train or plane trip.

- On/Off switch with dimmer
- Requires 1 x AAA battery (not included)
- Size 40(W) x 105(L) x 10(D)mm
- Gooseneck length: 250mm long

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Each	ST-3205	\$9.95	\$8.75	\$7.75



CLOCKS

LCD CLOCK WITH THERMOMETER

A slimline LCD clock that displays both the time and temperature simultaneously on a large, easy to read display. Stylish design with white face & silver coloured surround.

- Desk or wall mount
- 12/24 hour selectable
- °C / °F selectable
- Digit height: 35mm
- Temperature range: 0°C - 50°C
- Requires 2 x AAA batteries
- Dimensions: 215(L) x 73(H) x 22(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Clock with Temp	XC-0230	\$19.95	\$17.95	\$15.70



SUPERB LED ALARM CLOCK WITH FM RADIO

A compact, sleek and contemporary designed LED alarm clock that is full in features. Wake up to the sound of your favourite FM station with its in-built PLL (Phase locked loop) tuner for drift-free reception. The LED display is 24mm in height so it's very easy to read the time even without your glasses. Mains power supply included.

- Amber display
- Dual alarm
- Battery backup in case of mains loss
- Wake by radio or buzzer
- Hi-Lo dimmer
- 10 station memory
- Snooze 5-60 minutes
- Dimensions: 150(W) x 65(H) x 80(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Clock with FM Radio	AR-1801	\$29.95	\$26.90	\$23.70

LARGE RED LED DISPLAY ALARM CLOCK

This fashionable and compact alarm clock has a bright 45mm (1.8 inch) red LED display that is clearly visible from anywhere in your room. The alarm begins gently and gradually ascends louder to wake you up. All the standard functions you find on an alarm clock, including an extra large snooze bar on top. Features an adjustable display brightness and high or low alarm loudness setting. Mains powered with a 1.6m lead.

- 45mm (1.8") high LED display
- High and low alarms
- High and low dimmer display
- Mains powered
- Dimensions: 198(W) x 83(D) x 60(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Large LED Display	AR-1800	\$37.95	\$33.95	\$30.45

ALARM CLOCK WITH VIBRATING WRIST BAND

A clever device to wake you up if you are hard of hearing or don't want to disturb your partner (or other people in the home) each morning. The wireless wrist band sits comfortably around your wrist (or ankle) and will vibrate when the alarm activates, with or without an audible alarm on the clock. The clock requires 3 x AAA, and the wrist band can be recharged (around once a week) using the supplied USB cable. A second wrist band is available separately for your partner, which can be set at a different alarm time.

- Clock and calendar display
- Dual alarm and snooze
- LCD display with amber backlight
- Snooze function
- Indoor temperature display
- 12/24 hour format
- Dimensions: Clock 67(W) x 67(H) x 67(D)mm
Vibrator 43(W) x 33(L) x 10(D)mm
Wrist band 32(L) x 3(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Alarm Clock with Wrist Band	AR-1885	\$49.95	\$44.90	\$39.90
Spare Wrist Band	AR-1886	\$24.95	\$22.35	\$19.70

LCD ALARM CLOCK WITH TEMPERATURE & CALENDAR

With clearly visible size and stylish designs these LCD alarm clocks are ideal for your home or office workspaces. With several handy features they relay the time, date and temperature. Displays hour, minute, second, month, date and day.

- Thermometer measuring in Celsius or Fahrenheit
- Humidity measurement by percentage
- Alarm function control - turn on/off
- Alarm and snooze function
- Built in stand



280mm

Specifications	XC-0221
LCD Screen	192mm
Digits Height	60mm
Batteries Required	2 x AA
Dimensions	280(L) x 190(H) x 25(W)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Large 192mm	XC-0221	\$49.95	\$44.90	\$39.90

LED CLOCK RADIO WITH NIGHT LIGHT & BLUETOOTH® TECHNOLOGY

Wake up on time everyday to your favourite music with this LED radio clock alarm. Fashionable appearance and all the usual features you expect to find on an alarm clock, including sleep and snooze functions. What makes this clock different is the built-in night light and Bluetooth technology so you can stream music from your phone instead of using the built-in AM/FM radio. Also has a USB socket to charge your Smartphone and tablet. Supplied with a mains power adaptor.

- Stereo (2 x 2WRMS output power)
- Bluetooth® audio streaming
- 30mm (1.2") high LED display
- Night light bar on top panel
- PLL FM radio with 20 memory pre-sets
- Dual Alarm setting
- High/Low dimmer
- Wake to radio or buzzer
- Snooze, sleep function
- 3V battery backup (Requires 2 x AA batteries)
- Dimensions: 201(L) x 111(D) x 80(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Clock with Radio	AR-1804	\$59.95	\$53.95	\$47.90

STOPWATCH

SPORTS STOPWATCH

This handy 1/100th of a second sports timer will be a useful addition to any sports bag. Not only does it measure elapsed time for up to 24hrs, our water resistant stopwatch has a split time (Lap) function as well as alarm and calendar functions.

- Dimensions: 55(W) x 65(H) x 15(D)mm
- Includes 600mm lanyard

Thousands Sold



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
	XC-0270	\$12.95	\$11.35	\$10.35

OFFICE GADGETS

SOLAR POWERED FLASHING SIGN DISPLAY

A multitude of uses for this handy little display unit. You simply print out whatever you want to say on the sign, then slip it into the display. The solar cell keeps it flashing ad infinitum. Shop signs, desk photos, warning signs. Wall or table mount in landscape or portrait orientation. 1000s of uses and works in normal indoor light levels.

- Dimensions: 132(W) x 100(H) x 10(D)mm

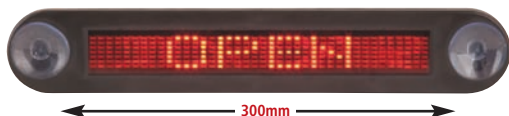
NEW LOW PRICE



↑	Cat.	Qty 1+
	LA-5105	\$4.95

LED SCROLLING MESSAGE SIGN

Programmable scrolling message signs for automotive or home, shop or office applications. Attach this to the rear window of your car to display messages to other motorists. It could be used by taxi and bus drivers to communicate vacancy or destination, emergency traffic control vehicles could communicate messages to slow down. Switch between pre-programmed messages easily with the supplied remote control and adjust the scrolling speed with ease.



Specifications	XC-0201
Mount	Suction
Power	12VDC cigarette lighter socket (incl.)
No. of LEDs	280 (7 x 40)
Programmable messages	10
No. of char. per message	80
Dimensions:	300(L) x 50(H) x 10(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Suction Mount Scrolling Sign	XC-0201	\$39.95	\$35.90	\$31.90

FANS

DELUXE WATER MISTING FAN

Be cool and comfortable while outdoors with this personal water mister and fan in one. It is handy and portable with a moulded hand grip and trigger pump for ease of use. Powerful enough to provide a significant amount of breeze but safe enough for the kids to use with soft blades. Great for use while camping, at the beach, or at sporting events etc.

- Use as a water misting fan, stand alone fan or stand alone mister
- Requires 2 x AA batteries
- Dimensions: 270(H) x 70(Dia.)mm



↑	Cat.	Qty 1 +	Qty 3 +	Qty 6 +
Misting Fan	GH-1071	\$10.95	\$9.75	\$8.75

RECHARGEABLE BATTERY OPERATED FAN

Beat any heat wave with this portable battery operated fan! Lightweight and powerful, it can be brought along to any BBQ, picnic and camping adventure. It's water resistance also makes it perfect for work sheds and near the pool. With its patented fan blade design and long running life, it really is the ultimate summer companion. Supplied with a power supply to charge the internal rechargeable batteries that can run for 6 hours when fully charged. It can also be powered by 8 x D cell Alkaline batteries (available separately).

Specifications	GH-1062
2-speed control	High & Low
Weight	1.8kg
Dimensions	330(H) x 300(L) x 90(W)mm



⬆	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Battery Operated Fan	GH-1062	\$89.95	\$80.95	\$71.95

BABY MONITORS

2.4GHZ WIRELESS DIGITAL BABY MONITOR - 7" LCD

As a parent you know there is nothing more important than the connection with your baby. Now you can see and hear your baby with the latest technology. It is 100% digital in which it avoids interference from other electronic devices, has an in-built infrared night vision, for round the clock monitoring and is wireless it also forwards you super clear picture and sound onto the 7" monitor. This new baby monitor will appeal to parents who want the very best for their new born.

Note: This device can also be used for security to monitor unwanted predators.

- Wireless - 4 channel
- Supports 4 cameras for one monitor
- 7"LCD colour screen
- Infrared night vision
- High sensitivity microphone
- 2 way communication
- VOX function
- 1 x 6V DC Adaptor
- 1 x 12V DC Adaptor
- 1 x AV Cable



Specifications	Camera
Imaging sensor	CMOS
Horizontal resolution	360 TV Lines
Viewing angle	60°
Min. illumination	1.5 Lux
Bandwidth	4MHz
Night vision range	3 - 5m
Battery working time	8 hrs (Using 4 x AAA battery not included)
Motion detection distance	>5m
Sound control sensitivity	>60dBA
Current consumption	150mA @ 15mA
Power supply	6VDC
Dimension	100(L) x 86(W) x 86(D)mm



⬆	Cat.	Qty 1 +	Qty 3 +	Qty 6 +	
	Baby Monitor	QC-3649	\$169.00	\$151.95	
	Spare Camera	QC-3648	\$89.95	\$80.95	\$71.95

RECHARGEABLE CAMERA & MONITOR KIT

A multi-purpose camera and monitor kit which can be used in the home or in the car for keeping an eye on an infant, or for general household surveillance. It includes a 4.3" LCD and a camera as well as suction mounts for each. Both the camera and monitor are completely wireless with internal rechargeable batteries so you need not worry about cabling at all. The units come pre-paired straight out of the box, so it's simply a matter of switching both on and audio/video will be streamed live from the camera to the monitor. Couldn't be easier! The camera features IR LEDs allowing it to feed viewable video footage back to the monitor. Mains adaptor and cigarette lighter cable are provided for recharging the camera & monitor units.



Specifications	QM-3217
Transmission Frequency	2.4GHz-2.48GHz
Transmission Power	17dBm
Operating Frequency	2450MHz
Unobstructed range	250m
Modulation mode	FHSS
Battery life	5 hours
LCD	4.3" TFT LCD
Camera dimensions	60(L) x 60(H) x 25(D)mm (excludes antenna)
Monitor dimensions	125(L) x 80(H) x 20(D)mm

2.4GHz DIGITAL



⬆	Cat.	Qty 1 +
	Camera & Monitor Kit	QC-3217 \$139.00
	Spare Camera	QC-3211 \$79.95

KEYFINDERS

KEYRING KEYFINDER WITH LED TORCH

Have you ever misplaced your keys and needed them in a hurry? This brilliant device will generate a beeping sound when it detects a whistle. It features a high performance IC with built-in auto power off function to preserve the batteries. It will work effectively within a 3 metre radius. It also doubles as a handy keyring torch!

- Batteries included.
- Uses 2 x LR44 batteries
- Dimensions: 52(L) x 40(W) x 15(W)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+	
	Keyring Finder	XC-0351	\$7.95	\$7.10	\$6.25

KITCHEN GADGETS

LCD TOUCH SCREEN COUNTDOWN TIMER

An easy-to-use countdown timer for the kitchen, home gym, study, etc. Features a backlit touchscreen, fold-out stand for sitting on a desk or magnets for attaching to a metal surface like a fridge. It has a stylish appearance and the numbers scroll downward with every second and minute, making it mesmerising to watch. At the touch of a button it can be turned into a stopwatch count-up timer.

Features:

- Touch screen with white LED backlit display
- Countdown range: 99 minutes and 59 seconds
- 2 x AAA batteries required
- Dimensions: 80(H) x 80(W) x 25(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Countdown Timer	QM-6325	\$14.95	\$13.45	\$11.95

RARE EARTH FRIDGE MAGNETS PACK OF 5

The nifty fridge magnets utilise rare earth magnets that are strong enough to hold up to 10 sheets of paper each on your fridge! Great for the home or office, their small size won't cover up your photos, notes or shopping lists.

- Each set includes 5 magnets.
- Dimensions: 20(H) x 11(Dia)mm

Paper not included



↑	Cat.	Qty 1+	Qty 6+	Qty 20+
Pack of 5	LM-1629	\$9.95	\$8.75	\$7.75

5KG SCALES WITH COUNTDOWN TIMER

An elegant kitchen scale with a large LCD screen display and TARE feature that allows you to weigh items without emptying the bowl. Features a UNIT key to convert the result between oz, g, and lbs, and a built-in countdown kitchen timer with alarm modes. Use the timer to remind you to take the dish out of the oven to avoid overcooking.

The scale is finished in white and has a glass plate, which allows you to weigh both liquid and dry items either directly on the weighing platform or using a container.



NEW 2015

Specifications	QM-7288
Capacity	5000g
Units	g/lb:oz
Resolution	1g/0.1oz
Batteries	Requires 2 x AAA batteries
Dimensions	220(L) x 165(W) x 10(H)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
5kg Scale	QM-7288	\$29.95	\$26.90	\$23.70

WIRELESS 5KG SCALES WITH CLOCK & THERMOMETER

Not your average kitchen scale. This digital kitchen scale comes with a wireless display that you can sit elsewhere on the bench, attach to the fridge or mount on the wall at eye level. Read the weight at a quick glance instead of looking under the large mixing bowl obscuring the display or fumbling for your reading glasses.

It also features a thermometer and a clock so the time and room temperature can be displayed when the scale is not in use.

The scale has a durable white piano finish with glass surface that is easy to clean. The wireless display has a built-in magnet, a kickstand for wall or bench mounting and a slot to mount to a wall screw.



NEW 2015

Specifications	QM-7289
Load capacity	Max. 5kg
Resolution	1g
Requires	2 x AAA for scales and 3 x AAA for the display
Dimensions scales	220(L) x 165(W) x 19(H)mm
Dimensions display	103(L) x 82(W) x 25(D)mm

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
5kg Scales	QM-7289	\$49.95	\$44.90	\$39.90

BATHROOM GADGETS

UV SANITISER TOOTHBRUSH HOLDER

An ultraviolet light box to sterilise your toothbrushes and stop the build up of potentially harmful bacteria. It helps remove odours and can hold up to 4 toothbrushes at one time. Features an integrated drip tray and toothpaste holder.

- Mains power supply included
- Dimensions: 235(H) x 115(L) x 90(W)mm



Note: Toothbrush not included



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
UV Toothbrush Holder	GH-1191	\$49.95	\$44.90	\$39.90

DUAL SIDED MAGNIFYING MIRROR

Never have trouble putting in those contacts or applying your make-up again. This dual sided mirror has one mirror at 1 x magnification and the other at 5 x magnification. The frame is rimmed with a LED light making it ideal to use at night or in poor light conditions.

- Mirror dimensions: 110(Dia.)mm
- Mirror and frame dimensions: 150(Dia.)mm
- Requires 3 x AA batteries (use SB-2425)
- Dimensions: 180(L) x 110(W) x 200(H)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Magnifying Mirror	GH-1067	\$29.95	\$26.90	\$23.70

MINI ELECTRIC WET & DRY SHAVER

Ideal for campers and mariners who need a quick way to keep their beard under control. Easy to clean and maintain, and only runs on 2 x AAA batteries (not included). It's waterproof and dustproof with a double blade design for a comfortable smooth shave.

- Dimensions: 40(W) x 78(H) x 14(D)mm



↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Mini Electric Shaver	GH-1521	\$8.95	\$7.95	\$6.95

MEN'S 3-IN-1 WET/DRY GROOMER

Trim your beard, moustache, sideburns, nose, ear or other facial hair. Cordless and waterproof, the nozzle can be rinsed after use. Three attachments are included - a long hair trimmer, beard/moustache and nose/ear hair trimmers. Runs on a single AA battery.

- 3 interchangeable heads
- Waterproof and hygienic
- 125mm long



↑	Cat.	Qty 1+	Qty 3+
3-in-1 Groomer	GH-1519	\$16.95	\$14.95

WATERPROOF SHOWER SPEAKER WITH BLUETOOTH® TECHNOLOGY

This waterproof shower speaker brings your favourite music to your bathroom. Listen to music wirelessly from your Bluetooth enabled Smartphone or laptop, and take calls wirelessly at the touch of a button. The device comes with a suction cap that allows you to stick it to any flat surface, and is powered by a built-in battery that can be charged with the supplied USB cable.



NEW 2015

Specifications	XC-5630
Maximum Range	10m
Charging Time	3 hours
Operating Time	5 hours
Dimensions	93(L) x 85(H) x 45(D)mm
Weight	99g

↑	Cat.	Qty 1+	Qty 3+	Qty 6+
Shower Speaker	XC-5630	\$34.95	\$31.45	\$27.90

HEALTH & FITNESS

USB RECHARGEABLE BLUETOOTH® PEDOMETER WITH APP

This tiny pedometer syncs with your Smartphone via Bluetooth® and sends live data as you exercise so can measure how far you've walked or run in km, how many steps taken, exercise duration and calories burned. This can all be viewed on weekly graphs so you can review your achievements. If the pedometer and phone are not synced, it will record data anyway and upload to your phone when you re-sync.

- The pedometer is recharged via USB
- Free iOS App available
- Dimensions: 38(L) x 30(W) x 9(H)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Pedometer	XC-0390	\$34.95	\$31.45	\$27.90

BLUETOOTH® HEART RATE MONITOR WITH APP

Monitors your heart rate to ensure you are optimising your exercise, and also records your exercise duration, distance, speed and calories burned. Simply place the comfortable textile strap around your chest and it will wirelessly transmit heart rate information to a Bluetooth® enabled Smartphone or Tablet using a free app called Endomondo Sports Tracker. This app is available on Google Play® and the Appstore®.



Features of Endomondo app:

- Track your heart rate
- Track any outdoor sport including duration, distance, speed and calories
- Enter a workout manually, e.g., a treadmill run or weight training
- Get audio feedback for every mile or km while exercising
- See your route on a map
- Easy to change battery hatch

Specifications	XC-0392
Battery life	32 months (using 1 hour a day)
Pulse rate range	30 - 239bpm
Compatible with	iPhone® 4s/5, New iPad®, iPad® 4, iPad® mini, iPod® touch 5
Buckle size	64(L) x 40(W) x 12.9(D)mm
Textile strap size	880(L) x 30(W)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Heart Rate Monitor	XC-0392	\$49.95	\$44.90	\$39.90

AUTOMATIC BLOOD PRESSURE MONITOR

Monitor your blood pressure at home. Using the oscillometric method it is designed to take accurate blood pressure readings from the wrist and calculate the average as well as store up to 3 readings. Press the start button and the microprocessor automatically calculates systolic and diastolic pressure as well as heart rate. Cost effective - less than one visit to a doctor. It's easy to use with a full instruction manual. Requires 2 x AAA batteries.

- 60 group memory
- Arrhythmia detection function (IHB)
- Stores readings for up to 3 individuals
- Automatic power off function
- Pulse range: 40-199 times per min

- Pulse & LCD display
- Calculate average measurements
- Automatic inflate and deflate
- Pressure range: 0mmHg-299mmHg

Note: This is not a medical diagnostic device and is intended to provide indicative readings only. It should be used in conjunction with advice from a doctor or other clinical professional.



	Cat.	Qty 1+	Qty 4+	Qty 10+
Blood Pressure Monitor	QM-7254	\$39.95	\$35.90	\$31.90

AUTOMATIC UPPER ARM BLOOD PRESSURE MONITOR

This pressure-cuff unit fits on your upper arm like the ones you find in most doctors rooms. This is called the Oscillometric system. It will measure 30-280mm mercury, and 40-195 pulse. It is fully self-contained, will blow up the cuff and then release it in a controlled way, automatically.



Specifications	QM-7261
Readings	Up to 100 readings
Accuracy	± 3mm Hg, ± 5% of pulse
Display	Date/Time, Systolic, Diastolic and pulse rate
Power	Requires 4 x AA batteries
Console dimensions	125(L) x 83(W) x 153(H)mm

Note: This is not a medical diagnostic device and is intended to provide indicative readings only. It should be used in conjunction with advice from a doctor or other clinical professional.

	Cat.	Qty 1+	Qty 3+	Qty 6+
Blood Pressure Monitor	QM-7261	\$59.95	\$53.95	\$47.90

WIRELESS DIGITAL BODY SCALE TO SUIT IPHONE®/IPAD®

With this Bluetooth® 4.0 enabled digital body scale, you can now instantly monitor and track your fitness on the go by recording and archiving your weight and Body Mass Index (BMI) on your personal iPhone® 4S/5 or New Generation iPad®. With the simple, easy to use and free of charge WiTscale app, you can conditionally share your fitness experience with your friends and family through Facebook or email. It is not just a body scale, WiTscale with apps can provide you an excellent tool to monitor your health and share your excitement with family and friends.

- Large 3.5 inches backlit LCD
- Smart power saving
- Wireless data record onto your Apple® devices*
- Easy to record weight and retrieve historical data
- Allows you to share your experience via Facebook or email
- Lightweight

Specifications	QM-7268
Weight Limits	7 to 150kg
Power Supply	2 x AAA batteries included
Operation Temp.	5 to 35 °C
Bluetooth	Bluetooth 4.0
Operation Range	Up to 10 metres
Dimensions	300 x 300mm
Weight	315g (including batteries)



*Apple devices supported: iPhone®4S/5, iPod Touch® 5th Gen, iPad Mini®

	Cat.	Qty 1+	Qty 3+	Qty 6+
Digital Body Scales	QM-7268	\$69.95	\$62.95	\$55.95

FOREHEAD THERMOMETER LCD

Quickly and easily check for a fever in an infant, child, or adult. Simply hold the probe end to the forehead and within 1 second a temperature reading will be returned. Ergonomic design with a storage case is included.

- Measures both Celsius (°C) and Fahrenheit (°F)
- Backlight LCD
- One second instant measurement
- Storage case included
- Power: 1 x CR2032 battery included
- Dimensions: 130(L) x 50(W) x 30(D)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Forehead Thermometer	QM-7271	\$29.95	\$26.90	\$23.70

MEDICAL EAR THERMOMETER

This thermometer measures a patients temperature via the ear canal - an accurate safe and non-invasive technique. It features a backlight readout so that you can measure, say, a child's temperature in a darkened room without disturbing their sleep.

- Fahrenheit/Celsius switch

Specifications	QM-7272
Range	32.0 °C to 42.9 °C
Accuracy	±0.3 °C
Response time	1 second
Power	Requires 1 x AAA battery
Dimensions	155(L) x 35(D) x 33(W)mm

OTHER THERMOMETERS AVAILABLE SEE PAGES 161 & 269



	Cat.	Qty 1+	Qty 3+	Qty 6+
Ear Thermometer	QM-7272	\$34.95	\$31.45	\$27.90

NON CONTACT BODY THERMOMETER WITH SMARTPHONE APP

A fantastic solution for parents - a thermometer to read your child's temperature instantly! No need to wait up to five minutes with a thermometer in your child's mouth for an accurate result, this non-contact thermometer uses infrared radiation to instantly and accurately measure both body temperature and surface temperature. Use it to ensure you heat up your child's food to an acceptable temperature using the surface temperature mode, and then use the body temperature mode to check if your child is running a fever. It's so effective in fact, that the United States FDA has given their stamp of approval on it!

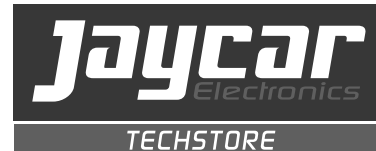
If all that wasn't enough, there is even the ability to link the unit to your iPhone® or Android® Smartphone, and using a free App you can track your child's temperature over time (and more!), or even use it as a guide for planning pregnancy. See our website for info on the app.

Specifications	QM-7201
Temperature range	0-50 °C (32 °F - 122 °F)
Accuracy	±0.3 °C
Response time	0.5 sec
Power off	Automatic
Measuring distance	50-150mm
Dimensions	145(L) x 57(W) x 35(D)mm



	Cat.	Qty 1+	Qty 3+	Qty 6+
Body Thermometer	QM-7201	\$89.95	\$80.95	\$71.95

Order Form



Post	Fax	Phone	Email
Freepost to Jaycar Techstore PO Box 7172 Silverwater DC NSW 1811	(02) 8832 3118	Free Call 1800 022 888 Credit Card Orders and International / Enquiries (02) 8832 3245	techstore@jaycar.com.au Website www.jaycar.com.au

Delivery Details

Name:

Phone: Fax:

Address:

Email:

Country: State: Postcode:

Have you purchased by Mail Order from us before? ☐ Yes ☐ No

If YES, please specify your account number

Has your billing address changed since your last order? ☐ Yes ☐ No

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Freight

Invoice Value	Standard / Road Freight 2-5 working days	Premium Freight Orders made before 12:00pm on a working day for Metro areas, other Premium freight requires a street No delivery to P.O. boxes
\$10-\$99.99	\$7.00	\$9.00
\$100-\$199.99	\$9.00	\$11.00
\$200-\$499.99	\$12.00	\$16.00
Over \$500	\$17.00	POA*
Over 20kg	POA*	POA*
Overseas Airmail	POA*	NA

One whole dollar per \$100 goods value or part thereof (Australia only). See Terms & Conditions for details.

* POA: Our staff will calculate the freight charge based on the order, freight method and destination. Staff will promptly contact you to advise of the charge

Subtotal		
Insurance		Aerocel, flammables, heavy and bulky items can only be sent by road.
Freight		Out of stock lines: Items under \$10 are not back ordered. Please re-order (once items) are in stock. If your order is unusually bulky, heavy or fragile, we may choose to send your goods to you by road at our expense.
Subtotal		We cannot send goods by road to a PO Box. However, if you feel your order may fit into this category, please include a street address - either work or home.
Less Credits		
Total		Freight information: Simply add the amount shown in the freight charges chart on the left. Don't forget to add extra amount for armal and insurance if you require these services. These charges are for goods sent by post in Australia only - not armal overseas or

Minimum order \$10

Aerosol, flammables, heavy and bulky items
can only be sent by road

Out of stock lines: Items under \$10 are not back ordered. Please re-order once item(s) are in stock. If your order is unusually bulky, heavy or fragile, we may choose to send your goods to you by road at our expense. We cannot send goods by road to a PO Box. However, if you feel your order may fit into this category, please include a street address -either work or home.

Freight information. Simply add the amount shown in the freight charges chart on the left. Don't forget to add extra amount for airmail and insurance if you require these services. These charges are for goods sent by post in Australia only - not airmail overseas or road freight.

Final check. Please make sure that you have given full details of the products you require, the correct prices, the full postage or transportation cost, plus make sure that your name and address are legible.

Your order will arrive faster if all details given are correct.
Minimum order amount \$10.
14 Day satisfaction guarantee.
Provided that you have returned the goods in original condition (and that means the outer packaging, if any, must be unmarked). You must keep your invoice as proof of purchase. We will not refund post, packing, insurance or other transport charges. Freight on returned goods must be pre-paid. Do not return goods by COD. Please do not ask for a refund after 14 days from purchase date (this allows for transportation delays).

*Overnight delivery. Available on request subject to conditions: Max physical/cubic weight 5kg. Area must be covered by next day service (phone for details). No PO Box address.

*Please see the Jaycar website for full terms and conditions.

Payment Details

Rewards or Trade Card Number

☐ Cheque/Money Order in A\$ (do not post cash) ☐ Credit Account (approved customers only)

☐ Gift Card

☐ Mastercard ☐ Visa ☐ Amex

K incurs
refunda

AMEX incurs a non-refundable 2.7% + GST Surcharge

Signature

[illegible]Exp: /

*Overnight delivery. Available on request subject to conditions: Max physical/cubic weight 5kg. Area must be covered by next day service (phone for details). No PO Box address.

*Please see the Jaycar website for full terms and conditions.

DISCLAIMER

All possible care has been taken in the preparation of this catalogue. However, specifications and particulars in relation to the products referred to in this catalogue are subject to change without prior notice. Some photographs contain samples which are representative only. Stocked items may vary in colour and look. Jaycar Electronics will not be held liable for any errors or omissions.

PRICES

All prices quoted in this catalogue include Goods and Services Taxes (GST) and are current at the time of printing. So you can be confident of price stability. At Jaycar Electronics, we make every endeavour to maintain prices for the life of the catalogue. However, factors beyond our control (such as changes in foreign currency exchange rates, changes in base material costs etc.) may vary costs and we reserve the right to amend prices accordingly.

STOCK AVAILABILITY

At Jaycar Electronics we are constantly seeking new products and due to the rapid developments within the electronics industry some products in this catalogue may become obsolete or discontinued during its life. In the event of this happening we apologise for the inconvenience and where possible will substitute a similar product of equal or better quality.

OUR RAINCHECK

If your local Jaycar Electronics store has sold out of a currently advertised line, we will be happy to issue you with a 'raincheck'. This 'raincheck' can be presented as soon as the stock arrives and you can buy the original item (or its comparable product) at the advertised price - even if the original promotion has ended. 'Rainchecks' do not apply to items that have been advertised as 'limited', 'discontinued', 'surplus' or 'clearance' ranges.

'CHANGE OF MIND' RETURNS

Although not obligated to do so, at Jaycar Electronics we appreciate that you may have second thoughts about your purchases and will give a 'Change of Mind' refund if goods are returned within 7 days (14 days for mail order and internet purchases). For 'Change of Mind' purchases, goods can only be accepted back for refund or exchange in "as sold" condition including undamaged original packaging, complete instruction books, manuals, accessories, etc. If freight expenses of any type have been incurred, these are not refundable. We regret that any cash, credit card, or EFTPOS refunds over \$250 must be refunded by cheque for security reasons. Jaycar does not provide credit notes. Your Sales Docket must accompany all returns. Note: Refunds on 'Change of Mind' purchases do not apply to books, batteries, headphones, health products, semiconductors, computer software, all recordable media, some tools and non millimeter test equipment (including cathode ray oscilloscopes), step-down transformers (240-100V), some party lighting and associated products.

WARRANTIES

Jaycar warranty period is 3 months from date of purchase, or such longer period as stated in this catalogue. Many products carry one year, two year, five year, or lifetime warranty or may qualify for over-the-counter replacement. These items are identified in the catalogue by the icons explained on page 5. If any defect in materials or workmanship in product sold by Jaycar Electronics is identified and notified to us within the warranty period then we will, at our discretion repair or replace the product. Jaycar Electronics does not accept any liability beyond this for consequential loss. Warranty is subject to us being satisfied that a defect was caused by defective workmanship or materials and was not caused by or was not substantially contributed to by other factors beyond our control, including (but not limited to) defective installation, maintenance, or repair; alterations or modifications of the product in a manner not recommended by the manufacturer; or any neglect, misuse or excessive use. The original Sales Docket or cash receipt must accompany warranty claims to provide starting date of the warranty period.

KIT WARRANTY

Most kits are successfully constructed with few problems however, once the kit is under construction all warranty is void, as we cannot guarantee assembler's workmanship or components that have been used.

STATUTORY WARRANTIES

Any statutory warranties applicable to your purchase will be honoured by Jaycar in addition to the warranties set out herein. If there is any conflict between any warranty herein contained and a statutory warranty, the terms of the statutory warranty will prevail.

FREIGHT CHARGES RELATING TO WARRANTY ITEMS

Warranty repairs or replacements of goods is free of charge however freight charges to and from the service department is required to be paid by the customer.

TRADE CARD

If you are professionally engaged in some aspect of the electronics industry on a daily basis, you may qualify for a Jaycar Electronics Trade Card. This facility is available in every store including TECHSTORE, to provide you with the opportunity to purchase at special

trade prices. Simply call into your local Jaycar store and ask the manager or if you are a TECHSTORE customer email us at techstore@jaycar.com.au. We can provide you with convenient locations, fantastic service and great prices! (Not available for transactions outside Australia and New Zealand.)

REWARDS CARD

For a full list of terms & conditions go to www.jaycar.com.au/rewards

ACCOUNT FACILITIES

Jaycar Electronics is happy to provide account facilities for the following organisations:

- Schools (Government & non-Government), TAFE, Colleges and Universities
- State & Federal Government Depts, including research facilities
- Hospitals
- Mining companies
- TV & Radio Stations
- ALL public ('LTD') companies

ALL 'Pty Ltd' companies, Sole Traders or Partnerships must complete an account application form. Simply write to "The Financial Controller", PO Box 7172 Silverwater NSW 1811.

If you are one of the above you can buy from us on a 30-day (strictly from invoice) account. The invoice will go with the goods or to your accounts payable office (you nominate). Non Payment of monies due will be cause to discontinue supply and to commence recovery procedures.

RECOVERY OF MONIES OWED

In the event that Jaycar needs to recover monies owed then the full balance on the account becomes due and payable and all costs of recovering this money will be borne by the debtor.

TECHSTORE - MAIL ORDER & INTERNET PURCHASES

For Mail Order & Internet Purchases special conditions apply:

- Goods - Aerosols, flammable, heavy and bulky items cannot be sent by post.
- Payment - via cheque, money order or credit card (MasterCard, Visa, American Express).
- Minimum Order Value - Mail order & Internet purchases have a minimum order value of \$10.
- International Orders - Please remember you may have to pay customs and importing charges at your end (if applicable). We cannot supply full customs documentation, but all parcels include required customs dockets. Should you require to return goods for any reason from outside Australia it is essential that customs documentation is included. If customs dockets are not included it can be a costly exercise to have the goods cleared by Customs and the customer must pay this charge. Failure to include customs documentation may result in long delays. Note: Jaycar Electronics cannot accept any responsibility or liability for the suitability of any product for use outside Australia, nor its compliance with local regulations.
- Freight - Various freight options and rates are given on the order form. After selecting the freight option that suits you, please clearly mark it and add these additional charges to the total on your order. Goods cannot be delivered to a PO box via road or air courier service.
- Missing or Damaged Goods - At Jaycar, we've sent out hundreds of thousands of parcels via post over the last 30+ years and the number of items that have been genuinely lost is less than 0.001%. We've found road and air transportation equally as reliable. However it must be emphasised that our responsibility for the goods ceases when the goods are handed over to the nominated carrier. Risk on the goods passes to you when the goods leave our warehouse. Our order form allows you to elect to have goods insured against loss in transit at your cost - otherwise loss of goods in transit is at your own risk. All claims for missing and damaged goods in transit must be lodged with the carrier or local Post Office. If goods have been insured please contact Jaycar Electronics.

- Insurance - If you wish to insure, it will cost \$1 for every \$100 value or part thereof eg. If your order is for \$145 the insurance will be \$2. This insurance covers goods DAMAGED in transit. (Note: Some items such as solar panels etc. are difficult to ship and have a higher insurance fee of \$7.50 per \$500.) If you do not wish to insure, a statement saying 'Insurance Declined' will appear on the order. If you post an order don't forget to consider insurance. We do not automatically issue insurance unless you specify. If you don't mention insurance you will NOT be insured.
- Out of Stock Items - Items under \$10 are not back ordered. Please re-order once item(s) are in stock.

STORE LOCATIONS AND HOURS

Store locations and hours are located on the back of this catalogue and were correct at time of print. For new stores and current trading hours visit our website at www.jaycar.com.au.

ANY PROBLEMS

We are proud of our standing with our Customers and are keen to get any feedback, good or bad, to improve our service, products, stores - or any aspect of our business. So please, do not hesitate to contact us.

JAYCAR AUTHORISED STOCKISTS/WHOLESALE ENQUIRIES

A listing of Jaycar Stockists in your area can be found on the inside back cover of this catalogue. For new Stockists visit our website at www.jaycar.com.au. If you are a reseller of electronics goods you may be able to increase your income by reselling Jaycar products. For more information contact The Stockist Manager on 1300 738 555 or email stockist@jaycar.com.au. For wholesale enquiries, please refer to our main supplier Electus Distribution (Australia: 1300 738 555 & New Zealand: 0800 235 328).

PRIVACY POLICY

Jaycar Pty Ltd (Jaycar) is committed to protecting the privacy of all individuals. To deliver our commitment to privacy, we will comply with the legislation and regulations of the countries in which we operate. This statement provides a succinct overview of how we handle personal information. Our complete Privacy Policy can be accessed on our website. Both this Condensed Privacy Policy and the complete Privacy Policy were updated March 2014. As an Australian registered company, Jaycar is bound by the current Privacy Act, any amendments and the Australian Privacy Principles (APPs) contained within that Act. All employees and officers of Jaycar are required to comply with the Act and this Privacy Statement. Jaycar has a Privacy Act Procedure which can be obtained by emailing privacyofficer@jaycar.com.au. Information or opinions which are collected, held, used or disclosed by Jaycar about an individual whose identity is apparent, or can reasonably be ascertained, will be protected by the standards outlined in this Statement. To deliver our commitment to privacy, we will:

- Be bound by, and comply with, the APPs under the Act in relation to personal information
- Communicate this Privacy Statement to all employees and stakeholders to ensure awareness of their requirement to comply with our privacy standards and to anyone else who asks for it
- Ensure lawful, fair and unobtrusive means are used to collect personal information that is necessary for our business purposes
- Collect sensitive information only with the individual's consent and not disclose any personal information to an unrelated third party, except with the individual's consent or where we are required to do so by law
- Take reasonable steps to destroy or de-identify personal information in a secure manner when we have no further need for it or are required to do so by law
- Ensure only authorised personnel who have agreed to keep personal information confidential have access to the information
- Take reasonable steps to keep personal information up to date, accurate and complete
- Provide individuals access to their personal information on request
- Periodically review and revise this Privacy Statement and related procedures to maintain relevance.

Jaycar recognises and respects the importance of each individual's privacy. This Statement and related procedures ensure all personal information held by Jaycar is handled appropriately and kept confidential.

What do we use personal information for?

Any personal details you provide will be used for the purpose of dealing with your request, enquiry, transaction or application for employment. This may involve disclosing your personal information to companies within the Jaycar Group, or to service providers who assist us in operating our business. These organisations are required to comply with the principles of this Statement.

Data Security

We take steps to protect the personal information we hold against loss, unauthorised access, use, modification or disclosure, and against other misuse. When the personal information that we collect is no longer required, we destroy or delete it in a secure manner, in accordance with our documented procedure.

Your Choices

You can access the personal information that we hold about you, and you can ask us to correct the personal information we hold about you. For more information, see our complete Privacy Policy which located on our website. If you are listed on one or more of our media or network email lists you can opt out at any time. You can unsubscribe by using the 'unsubscribe' link in our emails.

Our Obligations

Jaycar is bound by the information Privacy Principles in the Privacy Act. For more details see our complete Privacy Policy on our website.

How to Contact us

For further information contact us on privacyofficer@jaycar.com.au or alternatively you can write to Privacy Officer, Jaycar Electronics PO Box 7172 Silverwater NSW 1811, Australia.

LEGAL JURISDICTION

Jaycar operates under the laws and regulations of the State of New South Wales. Therefore any legal disputes will be conducted in courts or tribunals situated in New South Wales and under the laws and regulations of New South Wales, Australia.

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HM-3195	183	HP-0628	219	HP-1206	183	HS-9050	480	KJ-8086	50	LA-5070	458	LA-5596	450	LR-8824	466		MB-3606 303
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PP-4302	192	PS-0495	195	PS-0984	186	PS-4106	337	PT-4516	181	QC-1903	159	QC-8627	434	QM-3874	248	RC-5301	87
PP-5102	361	PS-0496	195	PS-0985	186	PS-4107	337	PT-4517	181	QC-1914	159	QC-8631	436	QM-6323	162, 269	RC-5302	87
PP-5106	361	PS-0497	195	PS-0986	186	PS-4108	337	PT-4518	181	QC-1932	158	QC-8632	426, 434	QM-6325	525	RC-5303	87
PS-0010	69	PS-0498	195	PS-0987	186	PS-4110	340	PT-4520	182	QC-1934	158	QC-8633	426, 434	QM-7201	526	RC-5304	87
PS-0105	197	PS-0499	195	PS-0988	186	PS-4115	337	PT-4521	182	QC-3122	436	QC-8634	434	QM-7209	162	RC-5305	87
PS-0107	197	PS-0516	187	PS-0989	186	PS-4117	337	PT-4522	181	QC-3130	489	QC-8635	431, 434	QM-7215	161	RC-5306	87
PS-0109	197	PS-0518	187	PS-0990	186	PS-4118	352	PT-4523	181	QC-3131	430	QC-8636	434	QM-7216	162	RC-5307	87
PS-0110	197	PS-0520	187	PS-1001	192	PS-4119	337	PT-4524	181	QC-3197	42	QC-8637	429, 436	QM-7218	162	RC-5308	87
PS-0120	197	PS-0522	187	PS-1003	192	PS-4120	337	PT-4525	181	QC-3199	42	QC-8639	429, 436	QM-7221	161	RC-5309	87
PS-0122	197	PS-0524	187	PS-1005	192	PS-4122	337	PT-4526	181	QC-3203	484	QC-8640	433	QM-7226	161	RC-5310	87
PS-0123	197	PS-0526	187	PS-1007	192	PS-4124	337	PT-4527	181	QC-3205	484	QC-8641	433, 435	QM-7232	165	RC-5311	87
PS-0126	197	PS-0528	187	PS-1009	192	PS-4125	337	PT-4528	181	QC-3211	222, 524	QC-8642	435	QM-7254	526	RC-5312	87
PS-0132	197	PS-0530	187	PS-1014	191	PS-4130	337	PT-4529	181	QC-3217	222, 524	QC-8643	433, 435	QM-7255	132	RC-5313	87
PS-0133	198	PS-0531	187	PS-1015	191	PS-4134	337	PT-4530	182	QC-3239	431, 434	QC-8644	435	QM-7258	165	RC-5314	87
PS-0134	197	PS-0532	187	PS-1017	191	PS-4140	338	PT-4533	181	QC-3328	437	QC-8645	433, 435	QM-7259	165	RC-5315	87
PS-0139	197	PS-0534	187	PS-1018	191	PS-4142	338	PT-4536	182	QC-3337	437	QC-8646	435	QM-7261	526	RC-5316	87
PS-0160	199	PS-0536	187	PS-1022	191	PS-4144	338	PT-4537	183	QC-3351	167	QC-8650	436	QM-7264	165	RC-5317	87
PS-0162	199	PS-0540	187	PS-1024	191	PS-4152	337	PT-4560	251	QC-3368	447	QC-8652	436	QM-7268	526	RC-5318	87
PS-0166	199	PS-0541	192	PS-1042	191	PS-4155	337	PT-4562	251	QC-3369	447	QC-8660	448	QM-7271	526	RC-5319	87
PS-0180	199	PS-0543	192	PS-1054	191	PS-4157	337	PT-4564	251	QC-3373	167	QC-8702	167	QM-7272	526	RC-5320	87
PS-0182	199	PS-0545	192	PS-1062	191	PS-4160	112	PT-4565	251	QC-3374	167	QC-8710	167	QM-7288	525	RC-5321	87
PS-0184	199	PS-0547	192	PS-1066	191	PS-4176	338	PT-4566	251	QC-3400	461	QC-8712	167	QM-7289	525	RC-5322	87
PS-0190	199	PS-0550	190	PS-1069	191	PS-4182	289, 339	PT-4567	251	QC-3402	461	QM-1020	149	QM-7304	232	RC-5323	87
PS-0192	199	PS-0551	190	PS-1082	189	PS-4184	289, 339	PT-4568	251	QC-3432	439	QM-1282	156	QM-7305	232	RC-5324	87
PS-0194	199	PS-0552	190	PS-1084	189	PS-4186	289, 339	PT-4600	181	QC-3434	439	QM-1283	156	QM-7306	232	RC-5325	87
PS-0195	199	PS-0553	190	PS-1092	190	PS-4301	192	PT-4601	181	QC-3506	439	QM-1284	156	QM-7307	232	RC-5326	87
PS-0196	199	PS-0554	190	PS-1094	190	PS-4303	192	PT-4602	181	QC-3519	226	QM-1323	150	QM-7310	269	RC-5327	87
PS-0250	194	PS-0592	203	PS-1210	200	PS-5100	361	PT-4603	181	QC-3520	226	QM-1328	149	QM-7312	269	RC-5328	87
PS-0252	194	PS-0605	204	PS-1220	200	PS-5104	361	PT-4603	181	QC-3530	225	QM-1444	151	QM-7314	162	RC-5329	87
PS-0254	194	PS-0610	204	PS-1410	201	PS-5110	361	PT-4607	181	QC-3532	225	QM-1448	232	QM-7316	269	RC-5330	87
PS-0255	194	PS-0611	204	PS-1450	201, 512	PS-5112	361	PT-4608	181	QC-3534	225	QM-1493	154	QM-7318	269	RC-5331	87
PS-0256	194	PS-0612	204	PS-1470	201	PT-0430	188	PT-4610	181	QC-3536	225	QM-1494	232	QM-8046	224	RC-5332	87
PS-0257	194	PS-0613	204	PS-1474	201	PT-0431	188	PT-4614	181	QC-3538	226	QM-1500	45, 148	QM-8047	224	RC-5333	87
PS-0258	194	PS-0614	204	PS-1478	201	PT-0450	188	PT-4615	181	QC-3622	462	QM-1502	148	QM-8048	224	RC-5334	87
PS-0259	194	PS-0618	204	PS-1924	190	PT-0451	188	PT-4618	181	QC-3623	462	QM-1523	148	QM-8049	224	RC-5335	87
PS-0260	194	PS-0620	204	PS-1926	190	PT-0452	188	PT-4621	181	QC-3624	462	QM-1524	149	QM-8050	224	RC-5336	87
PS-0261	194	PS-0622	203, 204	PS-1930	190	PT-0453	188	PT-4622	181	QC-3644	441	QM-1543	153	QM-8051	224	RC-5337	87
PS-0262	195	PS-0628	204	PS-1932	190	PT-0454	188	PT-4623	181	QC-3646	442	QM-1548	150	QM-8052	224	RC-5338	87
PS-0263	195	PS-0634	203	PS-1972	296	PT-0455	188	PT-4624	181	QC-3648	524	QM-1549	151	QM-8053	224	RC-5339	87
PS-0268	195	PS-0645	204	PS-1974	296	PT-0457	188	PT-4625	181	QC-3649	524	QM-1551	150	QM-8054	224	RC-5340	87
PS-0270	194	PS-0646	205	PS-2002	294	PT-0460	188	PT-4626	181	QC-3652	437	QM-1561	155	QM-8055	224	RC-5341	87
PS-0271	194	PS-0656	205	PS-2003	294	PT-0461	188	PT-4627	181	QC-3660	438	QM-1563	155	QM-8056	224	RC-5342	87
PS-0272	194	PS-0658	205	PS-2004	294	PT-0462	188	PT-4628	181	QC-3662	438	QM-1566	155	QM-8057	224	RC-5343	87
PS-0274	194	PS-0659	205	PS-2008	294	PT-0470	189	PT-4630	182	QC-3673	441	QM-1571	152	QM-8058	224	RC-5344	87
PS-0275	194	PS-0660	205	PS-2009	294	PT-0471	408	PT-4631	182	QC-3675	442	QM-1574	153	QM-8059	224	RC-5345	87
PS-0276	194	PS-0661	205	PS-2011	294	PT-0472	189	PT-4633	181	QC-3676	442	QM-1577	159	QM-8060	224	RC-5346	87
PS-0277	194	PS-0662	205	PS-2012	192	PT-0474	189	PT-4637	183	QC-3677	442	QM-1578	154	QM-8061	224	RC-5347	87
PS-0278	194	PS-0663	205	PS-2014	192	PT-0475	408	PT-4640	183	QC-3681	416	QM-1584	164	QM-8062	224	RC-5348	87
PS-0279	195	PS-0673	203	PS-2015	294	PT-0476	196	PT-4641	183	QC-3694	434	QM-1587	164	QM-8063	224	RC-5349	87
PS-0280	195	PS-0674	203	PS-2016	294	PT-0477	196, 408	PT-4643	183	QC-3695	461	QM-1589	163	QM-8064	224	RC-5350	87
PS-0281	408	PS-0686	203	PS-2017	197	PT-3000	189	PT-4645	183	QC-3696	462	QM-1591	163	QM-8065	224	RC-5351	87
PS-0291	408	PS-0690	203	PS-2018	292	PT-3002	189	PT-4650	183	QC-3699	462	QM-1592	163	QM-8066	224	RC-5352	87
PS-0292	196	PS-0712	202	PS-2019	295	PT-3004	189	PT-4651	183	QC-3735	463	QM-1594	152	QM-8067	224	RC-5353	87
PS-0293	196	PS-0740	185	PS-2020	296	PT-3006	189	PT-4653	183	QC-3737	463	QM-1601	162	QM-8068	224	RC-5354	87
PS-0294	196	PS-0742	185	PS-2022	296	PT-3008	189	PT-4700	181	QC-3752	42	QM-1602	162	QM-8069	224	RC-5355	87
PS-0295	403, 408	PS-0749	196, 408	PS-2024	296	PT-3012	189	PT-4701	181	QC-3754	42	QM-1622	164	QM-8070	224	RC-5356	87
PS-0296	408	PS-0753	196, 408	PS-2026	296	PT-3020	189	PT-4702	181	QC-3760	443	QM-1624	164	QM-8071	224	RC-5357	87
PS-0297	403, 408	PS-0761	196, 408	PS-2042	283	PT-3021	189	PT-4703	181	QC-3761	443	QM-1644	270	QM-8072	224	RC-5358	87
PS-0340	193	PS-0763	196, 408	PS-2046	283	PT-4402	179, 290	PT-4707	181	QC-3840	447, 491	QM-1646	270	QM-8073	224	RC-5359	87
PS-0348	193	PS-0764	196, 408	PS-2051	240	PT-4403	179, 290	PT-4708	181	QC-3842	446	QM-1662	273	QM-8074	224	RC-5360	87
PS-0350	193	PS-0765	196, 408	PS-2053	240	PT-4405	179, 290	PT-4709	181	QC-3844	446	QM-1670	166	QM-8075	224	RC-5361	87
PS-0352	193	PS-0767	196, 408	PS-2056	240	PT-4406	179, 290	PT-4710	181	QC-3846	446	QM-1671	166	QM-8076	224	RC-5362	87
PS-0354	193	PS-0769	196, 408	PS-2073	289	PT-4407	179, 290	PT-4711	181	QC-3848	446	QM-1676	166	QM-8077	224	RC-5363	87
PS-0355	193	PS-0771	196, 408	PS-2074	289	PT-4416	180, 290	PT-4715	181	QC-3850	443, 491	QM-1677	166	QM-8078	224	RC-5364	87
PS-0358	193	PS-0773	196, 408	PS-2080	76	PT-4420	180, 290	PT-4717	181	QC-3854	447, 491	QM-1678	166	QM-8079	224	RC-5365	87
PS-0359	193	PS-0774	196, 408	PS-2082	76	PT-4422	180, 290	PT-4718	181	QC-3860	446	QM-1679	166	QM-8080	224	RC-5366	87
PS-0368	193	PS-0775	196, 408	PS-2092	291	PT-4424	180, 290	PT-4721	181	QC-8017	448	QM-3505	144	QM-8081			

RE-6236	88	RL-6422	89	RP-7604	85	RR-0588	82	RR-2524	82	RR-3278	82	RU-6608	88	SB-1762	326	SB-2906	323
RE-6238	88	RL-6424	89	RP-7610	85	RR-0589	82	RR-2526	82	RR-3280	82	RU-6700	88	SB-1770	325	SB-2908	323
RE-6240	88	RL-6428	89	RP-7616	85	RR-0590	82	RR-2528	82	RR-3282	82	RU-6705	88	SB-1771	325	SB-2910	323
RE-6241	88	RL-6430	89	RP-7708	85	RR-0591	82	RR-2530	82	RR-3284	82	RU-6708	89	SB-1774	325	SB-2912	323
RE-6243	88	RL-6432	89	RP-7712	85	RR-0592	82	RR-2532	82	RR-3286	82	RU-6709	89	SB-1775	325	SB-2914	323
RE-6244	88	RL-6434	89	RP-7756	85	RR-0593	82	RR-2534	82	RR-3288	82	RU-6710	89	SB-1800	310	SB-2916	323
RE-6245	88	RL-6436	89	RP-8504	85	RR-0594	82	RR-2536	82	RR-3290	82	RU-6712	89	SB-1802	310	SB-2930	327
RE-6250	87	RM-7010	86	RP-8510	85	RR-0595	82	RR-2538	82	RR-3292	82	RU-6720	89	SB-1822	310	SB-2931	327
RE-6300	89	RM-7012	86	RP-8516	85	RR-0596	82	RR-2540	82	RR-3294	82	RV-5714	86	SB-2300	328	SB-2932	327
RE-6302	89	RM-7015	86	RP-8518	85	RR-0597	82	RR-2542	82	RR-3296	82	RV-5716	86	SB-2301	328	SB-2933	327
RE-6304	89	RM-7022	86	RP-8524	85	RR-0598	82	RR-2544	82	RR-3298	82	RV-5718	86	SB-2303	328	SB-2936	327
RE-6306	89	RM-7027	86	RP-8610	85	RR-0599	82	RR-2546	82	RR-3302	82	RV-5720	86	SB-2305	328	SB-2938	327
RE-6308	89	RM-7033	86	RP-8616	85	RR-0600	82	RR-2548	82	RR-3306	82	RV-5722	86	SB-2307	328	SB-2940	326
RE-6310	89	RM-7039	86	RP-8706	85	RR-0601	82	RR-2550	82	RR-3310	82	RV-5728	91	SB-2308	328	SB-2942	326
RE-6312	89	RM-7047	86	RP-8710	85	RR-0602	82	RR-2552	82	RR-3312	82	RY-6802	87	SB-2313	328	SB-2944	326
RE-6314	89	RM-7055	86	RP-8712	85	RR-0603	82	RR-2554	82	RR-3340	82	RY-6804	87	SB-2314	328	SB-2946	326
RE-6316	89	RM-7065	86	RP-8756	85	RR-0604	82	RR-2556	82	RR-3344	82	RY-6805	87	SB-2315	328	SB-2950	326
RE-6318	89	RM-7070	86	RP-8760	85	RR-0605	82	RR-2558	82	RR-3346	82	RY-6806	87	SB-2317	328	SB-2970	324
RE-6320	89	RM-7075	86	RQ-5268	81	RR-0606	82	RR-2760	82	RR-3347	82	RY-6808	87	SB-2319	328	SB-2980	325
RE-6322	89	RM-7080	86	RQ-5271	81	RR-0607	82	RR-2762	82	RR-3348	82	RY-6810	87	SB-2320	323	SB-2982	325
RE-6324	89	RM-7085	86	RQ-5272	81	RR-0608	82	RR-2764	82	RR-3349	82	RY-6816	87	SB-2321	323	SB-9010	327
RE-6326	89	RM-7095	86	RQ-5274	81	RR-0609	82	RR-2766	82	RR-3350	82	RY-6818	87	SB-2324	325	SF-0920	100
RE-6328	89	RM-7100	86	RQ-5275	81	RR-0610	82	RR-2768	82	RR-3351	82	RY-6820	87	SB-2328	323	SF-0922	100
RE-6330	89	RM-7105	86	RQ-5276	81	RR-0611	82	RR-2770	82	RR-3352	82	RY-6825	87	SB-2329	323	SF-1909	299
RE-6332	89	RM-7110	86	RQ-5277	81	RR-0612	82	RR-2772	82	RR-3353	82	RY-6901	88	SB-2331	323	SF-1910	299
RE-6334	89	RM-7115	86	RQ-5278	81	RR-0613	82	RR-2774	82	RR-3354	82	RY-6902	88	SB-2332	323	SF-1912	299
RE-6336	89	RM-7120	86	RQ-5279	81	RR-0614	82	RR-2776	82	RR-3355	82	RY-6903	88	SB-2333	323	SF-1913	299
RE-6338	89	RM-7125	86	RQ-5284	81	RR-0615	82	RR-2778	82	RR-3356	82	RY-6904	88	SB-2334	323	SF-1914	299
RE-6340	89	RM-7130	86	RQ-5285	81	RR-0616	82	RR-2780	82	RR-3357	82	RY-6906	88	SB-2346	324	SF-1915	299
RE-6342	89	RM-7135	86	RQ-5287	81	RR-0617	82	RR-2782	82	RR-3360	82	RY-6908	88	SB-2351	325	SF-1916	299
RE-6344	89	RM-7140	86	RQ-5289	81	RR-0618	82	RR-2784	82	RR-3362	82	RY-6910	88	SB-2352	325	SF-1917	299
RE-6346	89	RM-7145	86	RQ-5293	81	RR-0619	82	RR-2786	82	RR-3364	82	RY-6912	88	SB-2355	325	SF-1970	116, 251
RE-6348	89	RM-7150	86	RQ-5297	81	RR-0620	82	RR-2788	82	RR-3369	82	RY-6914	88	SB-2357	325	SF-1972	116, 251
RE-6350	89	RM-7153	86	RQ-5298	81	RR-0621	82	RR-2790	82	RR-3372	82	RY-6916	88	SB-2372	325	SF-1974	116, 251
RE-6702	88	RM-7159	86	RQ-5299	81	RR-0622	82	RR-2792	82	RR-3375	82	RY-6918	88	SB-2375	325	SF-1976	116, 251
RE-6704	88	RM-7165	86	RR-0524	82	RR-0623	82	RR-2794	82	RR-3420	82	RY-6920	88	SB-2394	324	SF-1978	116, 251
RG-5010	86	RM-7166	86	RR-0525	82	RR-0624	82	RR-2796	82	RS-5420	92	RY-6924	88	SB-2396	325	SF-1980	361
RG-5012	86	RM-7168	86	RR-0526	82	RR-0625	82	RR-2798	82	RS-5422	92	RY-6928	88	SB-2397	325	SF-1982	361
RG-5015	86	RM-7170	86	RR-0527	82	RR-0626	82	RR-2800	82	RS-5424	92	RY-6932	88	SB-2400	325	SF-1984	361
RG-5018	86	RM-7172	86	RR-0528	82	RR-0627	82	RR-2802	82	RS-5426	92	RY-6936	88	SB-2401	325	SF-1990	300
RG-5022	86	RM-7190	87	RR-0529	82	RR-0628	82	RR-2804	82	RT-4006	83	RY-6950	86	SB-2402	325	SF-1992	300
RG-5027	86	RN-3400	92	RR-0530	82	RR-0629	82	RR-2806	82	RT-4008	83	RY-6951	86	SB-2403	328	SF-1995	300
RG-5033	86	RN-3404	92	RR-0531	82	RR-0630	82	RR-2808	82	RT-4010	83	RY-6952	86	SB-2404	325	SF-1997	300
RG-5039	86	RN-3406	92	RR-0532	82	RR-0631	82	RR-2810	82	RT-4014	83	RY-6953	86	SB-2411	328, 330	SF-1999	300
RG-5047	86	RN-3411	92	RR-0533	82	RR-0632	82	RR-2812	82	RT-4016	83	RY-6954	86	SB-2413	323	SF-2104	116
RG-5050	86	RN-3412	92	RR-0534	82	RR-0633	82	RR-2814	82	RT-4018	83	RY-6955	86	SB-2415	324	SF-2105	116
RG-5055	86	RN-3413	92	RR-0535	82	RR-0634	82	RR-2816	82	RT-4020	83	RY-6956	86	SB-2416	323	SF-2106	116
RG-5060	86	RN-3415	92	RR-0536	82	RR-0635	82	RR-2818	82	RT-4022	83	RY-6957	86	SB-2417	323	SF-2107	116
RG-5065	86	RN-3416	92	RR-0537	82	RR-0636	82	RR-2820	82	RT-4024	83	RY-6958	86	SB-2418	323	SF-2108	116
RG-5070	86	RN-3417	92	RR-0538	82	RR-0637	82	RR-2822	82	RT-4026	83	RZ-6620	87	SB-2420	324	SF-2109	116
RG-5075	86	RN-3430	81	RR-0539	82	RR-0638	82	RR-2824	82	RT-4028	83	RZ-6622	87	SB-2421	324	SF-2110	116
RG-5080	86	RN-3432	81	RR-0540	82	RR-0639	82	RR-2826	82	RT-4029	83	RZ-6624	87	SB-2422	324	SF-2112	116
RG-5085	86	RN-3434	81	RR-0541	82	RR-0640	82	RR-2828	82	RT-4304	83	RZ-6626	87	SB-2423	323	SF-2114	116
RG-5090	86	RN-3436	81	RR-0542	82	RR-0641	82	RR-2830	82	RT-4306	83	RZ-6627	87	SB-2424	323	SF-2115	116
RG-5095	86	RN-3438	81	RR-0543	82	RR-0642	82	RR-2832	82	RT-4308	83	RZ-6628	87	SB-2425	323	SF-2116	116
RG-5100	86	RN-3440	81	RR-0544	82	RR-0643	82	RR-2834	82	RT-4310	83	RZ-6630	87	SB-2426	323	SF-2117	116
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TS-1112	174	WA-7011	381, 411	WC-6024	26	WH-3052	211	WH-5634	215	WQ-7424	417	XC-0270	524	XC-4427	15	XC-4973	501
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TS-1115	176	WA-7015	411	WC-6029	26	WH-3055	212	WH-5641	214	WQ-7432	424	XC-0324	269	XC-4432	20	XC-4991	489
TS-1116	174	WA-7016	411	WC-7500	506	WH-3056	212	WH-5642	214	WQ-7434	424	XC-0328	269	XC-4434	21	XC-4992	508
TS-1117	174	WA-7017	411	WC-7508	506	WH-3057	213	WH-5643	214	WQ-7436	424	XC-0329	269	XC-4436	13	XC-4993	508
TS-1118	174	WA-7018	411	WC-7510	506	WH-3060	212	WH-5644	214	WQ-7440	499	XC-0331	270	XC-4438	18	XC-4998	508
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TS-1305	175	WA-7024	412	WC-7513	506	WH-3063	213	WH-5646	214	WQ-7444	499	XC-0348	267	XC-4442	21	XC-5055	109
TS-1306	175	WA-7026	412	WC-7514	506	WH-3064	212	WH-5654	215	WQ-7445	500	XC-0351	524	XC-4444	15	XC-5067	484
TS-1307	175	WA-7030	412	WC-7516	506	WH-3066	212	WH-5656	215	WQ-7446	500	XC-0360	467	XC-4446	21	XC-5069	484
TS-1308	175	WA-7040	412	WC-7522	506	WH-3070	212	WH-5659	216	WQ-7900	424	XC-0362	467	XC-4448	18	XC-5074	503
TS-1310	175	WA-7041	412	WC-7534	506	WH-3072	212	WH-5661	215	WQ-7902	424	XC-0363	467	XC-4450	22	XC-5078	151, 503
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TS-1314	175	WA-7050	412	WC-7585	506	WH-3079	213	WH-5670	216	WQ-7911	419	XC-0369	268	XC-4458	17	XC-5130	486
TS-1315	175	WA-7054	412	WC-7586	506	WH-3080	212	WH-5671	216	WS-5502	215	XC-0374	270	XC-4460	16	XC-5146	486
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